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**WHAT ARE THE EXPERIENCES OF NURSES WORKING DURING
THE COVID-19 PANDEMIC, AND HOW WERE THEY SUPPORTED?
A CASE STUDY OF TWO COUNTRIES (ISRAEL AND NEW ZEALAND).**

by

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THESIS

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Abstract

The Covid-19 pandemic and all its associated stressors had a significant negative impact on the emotional and physical capacity of nurses. Now, as the pandemic ends, nurses are leaving the profession in droves, burnout being the suggested reason.

This study examines the experiences of nurses in regard to the support they received during the Covid-19 pandemic. The theoretical framework chosen for this study was Critical Social Theory because it examines the power dynamics and structural factors that shaped nurses' responses and their capacity to care. The methodology for this work was Critical Discourse Analysis, underpinned by a Foucauldian lens as it allows for a critique of how power relations and discourses shaped knowledge, practices, and subjectivities of nurses and their practice. A case study of nurses from two countries (Israel and New Zealand), was used to examine the discourses of the pandemic across public, organisational and operational levels of health care. Methods included interviews, a content analysis of texts, and archaeology/ genealogy of the pandemic. As my personal journey is integral to the study, I have also integrated an autoethnographic approach as it captures my firsthand experiences to provide rich, contextual data to support and inform the nursing perspective.

The nurses working in health care in the pandemic years describe struggles with illogical rules, confusing information, lack of personal protection, and questions about principles and ethics, in contrast with the natural and professional commitment to care for the patient. In conclusion, rather than burnout due to Covid-19 pandemic, the concept of 'moral injury' due to systemic pressure more accurately reflects the ongoing crisis in the nursing profession. This issue cannot be solved through resilience training or special wellness programs, as advocated by some professionals. Instead, a need for a systematic change is argued.

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And my daughter, Kim – fafa.

PhD Thesis Declaration

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Glossary

Biopolitics	A control apparatus exerted over a population as a whole, citing the ratio of births to deaths, the rate of reproduction, the fertility, or a population (Foucault: Discipline and punishment, 1977)
Biopower	A form of political power that revolves around populations (humans as a species or as a productive capacity) rather than individuals (humans as subjects or citizens) (Foucault: History of sexuality, 1978)
Covid-19	Coronavirus disease is an infectious disease caused by the SARS-CoV-2 virus (WHO)
Covid-19 vaccine	A pharmaceutical means intended to provide acquired immunity against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) the virus that causes coronavirus disease (CDC 2022)
Digital health	The use of digital technologies and accessible data
Netizens	Citizens of the net, net citizens. A person actively involved in online communities
Non-Pharmaceutical Interventions	Masking, social distancing, surface cleaning, lockdowns
Panopticon	First used by the philosopher Jeremy Bentham in the late 18th century for his design of workhouses, asylums, and prisons that had a circle of single cells around a central tower for constant surveillance (Oxford Reference, 2022)
Surveillance	Tracking and monitoring of people's actions (Oxford Reference, 2022)
Vaccination passport / Green passport	Physical or digital document providing proof of vaccination against one or more infectious diseases

Table of Abbreviations

AI	Artificial Intelligence
CDC	Centres for Disease Control and Prevention
CDA	Critical Discourse Analysis
CST	Critical Social Theory
ED	Emergency Department
ER	Emergency Room
FDA	US Food & Drug Administration
FOIA	Freedom of Information Act
ICU	Intensive Care Unit
IDF	Israeli Defence Force
IL	Israel
MIQ	Managed Isolation and Quarantine
MoH	Ministry of Health
NICU	Neonatal Intensive Care Unit
NZ	New Zealand
OECD	Organisation for Economic Co-operation and Development
ONS	Office for National Statistics UK
PCR	Polymerase Chain Reaction
PICU	Paediatric Intensive Care Unit
PPE	Protective Personal Equipment
R0	R-naught
RN	Registered Nurse
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
VAERS	Vaccine Adverse Event Reporting System
WHO	World Health Organisation

Chapter One: Being Essential

“I still don’t understand the global outbreak of collective hysteria, shelving of all existing pandemic plans, failure of medical professions to speak out, and astonishing public compliance with authoritarian policies” (Thakur, 2022, p. 2)

1.1 Preface

I grew up in the Communist bloc, in Czechoslovakia, where the discourse between the official narrative and the illegal radio stations, ‘The Voice of America’ and ‘Free Europe’, was an everyday reality. I knew what I was allowed to say in school, which books I could read only at home, and how to correctly answer questions, so I would not jeopardise my university application. When the Berlin Wall fell in 1989, I took advantage of the open borders. I lived, studied, and worked all around the globe. As a school librarian in South Africa, I discussed ‘libri prohibiti’ (forbidden books) with parents, defending Harry Potter books. In Namibia, I saw for the first-time real poverty, volunteering in a state hospital with HIV positive children. While working in a Canadian prison, I listened to the life stories of prostitutes, drug addicts, and murderers. I saw first-hand the benefits of baby programs in jail systems, the benefit of good schooling, the problems of re-education and re-integration of people with criminal records into society. In Israel I volunteered in a hospice run by nuns. The experience of people dying in a Jerusalem nunnery, with all the religious and political conflicts spiralling nonstop around us, changed me. I had many, many patients telling me – ‘do not wait to live your life, the time is really short’. To process all this, I completed my Master of Public Health, Master of Arts in Social Work, and later a Bachelor of Nursing. I went to work in a Bone Marrow Transplantation ward. Due to my East-bloc Soviet education I speak Russian, so I was often assigned to work with private patients from the former USSR. I discussed politics, culture, and history with parents of little children, who lived in the ward for weeks and months, looking for a miracle.

During Covid-19 I worked in my assigned ‘bubble’, and I took full advantage of being an essential worker. I was allowed to walk outside, take the bus to work, and talk with people during my commute. I was never isolated, never under lockdown, unlike most of the world. Instead of full wards, as projected on TV, I saw empty hospital and a ghost-like emergency room (ER). Our instructions on how to care for patients changed frequently, for example, masks were to be worn, yet the type of mask and the place where it should be worn and for how many hours, changed according to the availability of the masks. Around the world schools were closing and then not closing; borders were opening, restricting, closing; isolation rules were changing, and then mandatory quarantine came into effect, until two negative PCR tests, then it simply became an isolation for 14 days, 10 days, 7, 5, Patients were not sure if they were allowed to come to hospital or not. Chaos.

In 2020 I worked as a registered nurse in Israel. The first Covid-19 positive case arrived in Israel from the Diamond Princess Cruise ship in February 2020. By March 2020 the number of positive cases started to climb rapidly and on April 8, 2020, we entered the first strict lockdown. It was Passover, the holidays of freedom, the day celebrating the Exodus from slavery, the day Jews talk all night about the plague send by God, killing all the Egyptian firstborn. The Hebrews were given a warning, to mark their door posts with the blood of a sacrificial lamb, so the plague did not enter their households. Like the original Passover, with Covid-19, the population were saved by staying indoors. Unless you were an essential worker.

As an essential worker, I moved freely around Jerusalem, where I lived, and Tel Aviv, where my hospital was. I worked in a regular hospital ward during the “first wave”,¹ and a ‘corona department’ during the “second wave.” I participated in a “vaccination drive” while working in a haemato-oncology ward during the “third wave.” This allowed me to experience the different challenges the Covid-19 situation brought to hospitals. I know first-hand the infectious joy of the vaccination operation, where within two weeks ten per cent of the population received their first Pfizer

¹ The tracking of Covid-19 during the pandemic was described as waves. Waves relate to key peak times in infection and changes to the virus as it mutated. Covid waves in Israel: Feb/May 2020 First (Wuhan); Sep/Oct 2020 Second (Alpha/Beta); Nov/Jan 20/21 Third (UK); June/Aug 2021 Fourth (Delta); Dec/Jan 21/22 Fifth (Omicron)

vaccination. The hope was that the pandemic was over and a green passport² would give us the ticket back to normal life. Unfortunately, at the same time as the vaccination numbers in Israel climbed, so too did the recorded cases of Covid-19 infections (Bergwerk et al., 2021). Israel saw its hardest Covid-19 wave during January/February 2021. The emotions of vaccine joy mixed with never-ending death statistics led to a complete seal of the border, no planes were allowed to land or to leave the international airport. The Jewish state, for the first time in its history, broke the promise made in 1948- all Jews from all countries in the world will always find safety and security in Israel. As mentioned by Lipman (2021), “The state lost its humanity during the pandemic” (Lipman, 2021, para 2.). In the name of the greater good we forget the individual human.

This thesis is motivated by my own experiences as a nurse working during the Covid-19 pandemic. I specifically focus on the time from February 2020 to June 2023. The development of my positionality is explained in this chapter. In order to acknowledge the subjective nature of qualitative research and my experience, I use the first person, as argued by Webb (1991) in the ‘Journal of Advanced Nursing’: “The use of the first person is essential to counteract the notion that researchers do influence, exercise choices, and make decisions about the direction of their research and the conclusions they draw” (p.752). This is my story.

1.2 Background

The SARS-CoV-2 virus was declared a global pandemic in March 2020 (WHO, n.d.a), with some of the earliest and most severe impacts seen in regions like China, Northern Italy, and New York. In response, a rapidly expanding lockdown approach was adopted worldwide (Megna, 2020). The media flooded the public with alarming reports detailing rising death tolls and overwhelmed intensive care units (ICUs), often accompanied by striking images of health professionals clad in full-body protective gear, symbolizing the struggle against Covid-19 (Sashin, 2020; Hinnant, 2020). As fear

² The green / vaccination passport is a worldwide record card that was introduced at the commencement of Covid-19 vaccinations. It allowed vaccinated people passes to places that were off limits to those people who were not vaccinated.

of the virus escalated, reports emerged indicating that its symptoms could be more severe than those associated with severe influenza, affecting multiple body systems and leading to rapid fatalities (Colaneri et al., 2021; Colaneri et al., 2020). Expert modeling projected the virus's trajectory with and without non-pharmaceutical interventions, and these predictions prompted widespread global restrictions (Fergusson et al., 2020; Megna, 2021; Magness, 2021a; Magness, 2021b). Economies were thrown into turmoil, with many workers being stood down or made redundant and supply chains disrupted on a global scale (Walmsley et al., 2021; Foster, 2022a; Foster, 2022b).

As strict regulations limited freedom of movement, choice, and speech—especially concerning pandemic management—as currently highlighted in the *Missouri v. Biden* case (Kheriaty, 2023c), anti-mandate and anti-government sentiments began to rise. Isolation became rampant, dividing communities and leading to the widespread sharing of information that contradicted the official narrative, particularly via social media platforms. This virtual discourse was often met with censorship and fact-checking, further entrenching societal divides. Desmet (2022) argues that the current climate of fear and psychological discomfort cannot be solely attributed to the virus itself; instead, it stems from a collapse of the grand narrative underpinning our society. This narrative, deeply rooted in mechanistic science, reduces individuals to mere biological entities, neglecting their psychological, symbolic, and ethical dimensions. Such reduction has severely impacted human relationships, fostering isolation both from others and from nature. As a result, individuals have become disconnected from the world around them, leading to a state of alienation. “It is precisely this ‘atomized subject’ that, according to Arendt, is “the elementary building block of the totalitarian state” (Desmet, 2022, p. 25).

In the context of the nursing workforce, the pandemic has been characterized as a “crisis within crises” by Turale and Nantsupawat (2021), who emphasize that the additional pressures of Covid-19 care have exacerbated pre-existing workforce shortages. Emerging literature suggests that the pandemic has significantly affected nurses' coping strategies, with mental health issues like exhaustion and burnout becoming increasingly common (Queiroz et al., 2021; Turale & Nantsupawat, 2021). In Israel, a study by Dopleit et al. (2021) revealed that although healthcare professionals

were often hailed as “fighters on the frontlines” (p. 7), nurses reported heightened anxiety and fear of transmitting the virus to their families. They faced challenges such as remote patient care while donning full PPE, working extended hours, and lacking consistent managerial support. Many nurses indicated that they had received little preparation for the pandemic and minimal emotional support during this prolonged crisis.

The disruption to healthcare services has been extensive. In the early months of the pandemic, critical shortages of Personal Protective Equipment (PPE) forced many healthcare workers to operate without adequate protection (Battista et al., 2020; Gray et al., 2021). Healthcare workers grappled with a dissonance between their professional responsibilities and the fear of becoming patients themselves or infecting their families, further intensifying their emotional and physical stress. There is a persistent tension between nurses’ commitments to their patients and society and their rights to self-care during this time (Cíntia et al., 2021; Sahay & Dwyer, 2022; Savitsky et al., 2021b; Sperling, 2021a). Research is increasingly focusing on the psychological harm, moral injury, burnout, and secondary trauma experienced by healthcare professionals due to the demanding workloads imposed by the pandemic.

This research aims to explore the differences between two countries with markedly different pandemic trajectories up to June 2023: Israel, which was among the first nations to experience high Covid-19 case numbers, and New Zealand, recognized for its zero-Covid strategy. Israel, with a population exceeding 9 million, reported over 833,300 Covid-19 cases and 6,450 deaths by June 2022, with over 80% of those aged 30 and above fully vaccinated. In contrast, New Zealand, with a population of approximately 4.9 million, recorded just 2,855 positive cases and 26 deaths by June 2022, achieving a vaccination rate nearing 90%.

1.3 Nurses in the pandemic

At the onset of the pandemic, frontline health professionals were celebrated as heroes, valiantly holding the line and fighting the good fight (Bert De, 2020; Mohammed et al., 2021; Boulton et al., 2022; Dopelt et al., 2022). However, as previously noted, the implementation of vaccine mandates in 2021 further strained an

already diminished nursing workforce and placed additional pressures on healthcare services (Ray, 2021; Hannah, 2022; Douglas et al., 2021; Longmore, 2022). Those once honored as heroes during extreme circumstances were now labeled ‘anti-vax’ pariahs, regardless of their individual reasons for vaccine hesitancy. In Israel, unvaccinated nurses were allowed to continue working as long as they underwent regular Polymerase Chain Reaction (PCR) testing, while in New Zealand, unvaccinated nurses were barred from working until September 2022 (Hannah, 2022). Each healthcare facility in New Zealand is now permitted to establish its own regulations regarding the vaccination status of its workers (Government NZ, 2022).

As the world moves beyond the official pandemic era, we are left with a healthcare workforce that is emotionally and physically drained. Numerous studies have raised alarms about how the pandemic has disrupted not only individual lives but also entire economies, significantly impacting health through an overburdened workforce and the erosion of necessary funding for essential healthcare services (Sabhlok, 2020; Frijters et al., 2021; Horton, 2021; Foster, 2022b). Understanding how nurses were supported during the pandemic is crucial for determining future strategies for recovery and resilience.

Globally, the pandemic has imposed heavy demands on the health workforce due to the emotional strain of working in an uncertain and ever-changing environment, physical exhaustion from extended shifts, and the constant fear of transmitting the virus to family members. With staff either voluntarily leaving or being stood down, those who remain face increasingly heavy workloads, enduring longer hours with fewer colleagues. Moreover, in countries such as Canada, the United States, and the United Kingdom, staff are now being required to work even when they have tested positive for Covid-19, only permitted to take sick leave if they exhibit symptoms (Hitch, 2022). This not only contradicts the stringent infection control measures previously enforced during the pandemic but also leaves staff feeling even more vulnerable and undervalued by their organizations. In Australia, where 'no jab, no work' mandates are in effect, over 48% of emergency department staff reported their intention to leave their positions, according to a study (Cornish et al., 2021).

1.4 Research question

The primary question for this study is to explore in depth the experiences of nurses working in the direct clinical Covid-19 pathway: **What are the experiences of nurses during the Covid-19 pandemic, and how were they supported?** The study seeks to gather information on how organizations have supported their healthcare workers throughout the pandemic, specifically examining the policies implemented to address the emotional, physical, and mental health of these workers. Additionally, it will investigate the impact of mandatory work and vaccination orders on nursing workforce retention.

The aims therefore are to:

- Map the global trajectory of Covid-19 in relation to healthcare practice to understand the influences and events that have directly impacted on the nursing workforce.
- Explore the experiences of nurses in regard to the support they have received or are receiving from their employers, governments, professional bodies and health ministries, when working in areas directly exposed to Covid-19.
- Compare the approaches taken by both countries in relation to workforce wellbeing during the pandemic. This includes all aspects of workforce support related to the pandemic and how this has impacted on nurses' capacity to care for themselves, their families and their patients.

1.5 Researcher's position in this study

During the first two years of the Covid-19 pandemic, I was a nurse in Israel, working in my substantive specialty area while also volunteering in Covid-19 wards and vaccination centres. I consistently worked long hours throughout the pandemic, and I often wondered what meaningful support was being offered to health workers who were stressed, tired, and fearful. This led me to question whether any countries had provided support to their healthcare staff during these challenging times, and if so, what that support entailed. As a nurse and as the researcher, I am both an insider and an outsider. I understand the situation surrounding nursing patients with Covid-19 and therefore I can identify those factors that may have remained obscured, because

nurses have not had the opportunity or the confidence to speak out. This knowledge is important when undertaking the interviews and will inform discussion with participants, although I am also aware of the need to remain objective.

Given my personal experiences, the study will include field notes documented during the pandemic, which capture my own observations and reflections. These field notes will play a significant role in shaping the findings of the research, providing a unique, firsthand perspective that complements other data sources. By incorporating my lived experiences, the study can explore the nuanced realities faced by healthcare professionals during this unprecedented time.

Field notes serve as a vital tool in developing multifaceted data within the context of the study. They offer rich qualitative insights that can deepen our understanding of the emotional, social, and professional challenges encountered by nurses and other frontline workers. Through detailed descriptions of interactions, environments, and personal feelings, these notes illuminate the complexities of providing care during a global health crisis.

Moreover, the use of field notes enhances the study's reflexivity, allowing for critical self-examination of how my perceptions and understanding have evolved over time. As noted by Philippi and Lauderdale (2018), reflexivity is essential in qualitative research, as it encourages researchers to consider how their backgrounds, biases, and experiences influence the research process and outcomes. By reflecting on my journey through the pandemic, I can better contextualize the data and acknowledge any shifts in my perspectives regarding nursing, healthcare delivery, and the broader implications of the pandemic.

In essence, integrating these field notes into the study enriches the overall narrative, providing a personal lens through which to interpret the data. This approach not only enhances the validity of the research findings but also contributes to a more comprehensive understanding of the lived experiences of healthcare professionals during this challenging period. Ultimately, the inclusion of these reflections fosters a deeper engagement with the material, paving the way for more informed discussions about the future of nursing and healthcare systems.

The importance of this study arises from widespread concerns among countries regarding the significant depletion of their nursing workforce. Many nurses have expressed intentions to leave the profession following their experiences caring for Covid-19 patients (Buchan & Catton, 2020). This phenomenon highlights a critical vulnerability in healthcare systems that were already stretched thin before the pandemic. The emotional and physical toll of working under such intense conditions has led to increased burnout and dissatisfaction, prompting many healthcare professionals to reconsider their careers.

This issue has become even more pressing as numerous countries have enacted legislation mandating that frontline workers who are not vaccinated must stand down. New Zealand was one of the first countries to adopt such a mandate, setting a precedent that other nations have followed. These mandates not only affect the immediate availability of healthcare personnel but also exacerbate existing staffing shortages, further complicating the provision of care in an already strained system.

As healthcare systems navigate the ongoing impacts of the pandemic, understanding the factors that contribute to nurses' decisions to leave the profession becomes crucial. This study aims to shed light on these issues, exploring how vaccination mandates and the pressures of pandemic-related care contribute to workforce depletion. By addressing these concerns, policymakers can better strategize to retain nursing staff, ensuring that healthcare systems remain robust and capable of meeting the needs of the populations they serve. Ultimately, this research seeks to inform future practices and policies that not only support the current workforce but also attract new professionals into the nursing field, securing the future of healthcare delivery.

1.6 Chapters overview

This chapter has introduced the research topic and question; outlining the aim and objectives. Chapter Two provides an overview of the health care systems in Israel and New Zealand. The differences and similarities in each country are examined as well as the way in which both countries dealt with the pandemic. Detailed outline of vaccination timeline and the approach to vaccination mandates are described.

Chapters Three and Four explain the methodology and methods, respectively, that were used to underpin the CDA of the pandemic literature, and mass and social media both overall to determine the genealogy/archaeology of the discourse and in Israel and NZ to establish a comparative case study. I elucidate the reason for using mixed methodology. Critical Social Theory (CST) is the umbrella for my philosophical and theoretical framework, with special emphasis placed on Foucault's exploration, as described in 'The birth of the clinic' (1973) and 'The birth of the prison' (1977). Fairclough's theory on language and power (2015) provides context for the investigation of the Covid-19 narrative. The advantages and disadvantages of exploring the thesis question through different lenses, from micro through meso to macro levels, are discussed and tools used for the research introduced.

Chapter Five, a scoping review investigates available peer reviewed literature about nurses during the Covid-19 pandemic in Israel and New Zealand. Specific themes were identified and are discussed in detail. The similarities and differences between the findings in both countries are explored. The mental health risks of working during the time of Covid-19 were identified early in the pandemic, however, there is a gap in information about actual tools used to support nurses in the field. The problem of 'covidization' in studies and research papers, where 20% of all scientific papers published in 2020/21 were Covid-19 related (Ioannidis et al., 2022), is mentioned as well.

Chapter Six examines the role of media during the pandemic and the rise of the infodemic, mis and dis information, as well as a rise of censorship. To uncover the root of the problem I investigated the tension in the field by talking with the nurses, the health care workers directly involved in patients care during the pandemic. Chapter Seven discusses the interviews with nurses in Israel and New Zealand, examining their perspective in detail together with my own experience.

In Chapter Eight I summarize my work. I demonstrate the discourse of the Covid-19 narrative by analysing themes from the literature and secondary sources, against the information provided by the nurses. Using Fairclough's situational context map I outline what lessons can be learnt from the pandemic. Fairclough's social order of

discourse analysis suggests that a combination of language, power and ideology are used to shape the social order. A discourse is a powerful tool for social control, allowing dominant groups to maintain their power and authority by means of language (Fairclough, 2015). I discuss the one protective tool nurses turn to; evidence-based knowledge acquired through research and experience. I place this against the current WHO pandemic treaty recommendation

Chapter Two: The Health Care Systems

This chapter introduces the health care systems of Israel and New Zealand to set the stage for a more informed understanding of findings included in Chapter Six, Secondary Sources and Chapter Seven, Interviews with the Nurses. The comparison of the two health care systems is important in the context of the Covid-19 response by each country, to better understand the challenges faced by each as well as the similarities. The military system of Israel has an advantage during emergency situations, when resources need to be activated fast, and the chain of commands is put in place. On the other hand, NZ tried the approach of a zero-virus entrance to the island, due to its favourable location. This chapter will outline both the more action oriented and more passive oriented reaction, which can be especially seen in the vaccination speed and numbers.

Data were retrieved from an official OECD web site (OECD, n.d.). Overall, the total population of Israel is almost double the population of NZ. However, the number of nurses is comparable, meaning there are 6 nurses per 1000 in Israel and almost 12 nurses per 1000 in NZ. Even though the GDP is very similar (\$50,204 and \$50,411, respectively), health spending per person is higher in NZ (\$4,469) compared to Israel (\$3,057). There is a dramatic contrast in density, where 400 Israelis live per km², and only 18 people in NZ. Both countries have similar life expectancy, 80.5 and 80.2, with Israel having much higher fertility of 2.9 compared to 1.61 of NZ. Table 2-1 shows the similarities and differences between the two countries, related to health care.

Table 2-1: Health Care systems Israel and New Zealand

	Israel	New Zealand
Total population	9, 593 000	5, 084 300
Total number of nurses	61 276	55 802
Life expectancy	80.5	80.2
Infant mortality/1000	2.3	3.4
Hospital beds/ 1000	2.9	2.49
Health spending/ person	\$3,057	\$4,469
Average length of hospital stay	4.6	4.9
Median age	30.5	37.9
Population density per km ²	400	18
ICU beds/1000	2.15	? (see below)
Fertility	2.9	1.61
GDP	50 204	50 411

The question about ICU beds in New Zealand is a curious one as the OECD has no information. The *New Zealand Medical Journal* disclosed the number as approximately 3.5 staffed ICU beds per 100 000 (Young et al., 2021) while a reply letter from the Prime Minister’s Office with the subject: ‘Official Information Act Request relating to Intensive Care Unit beds’, put the number as 324 beds in total for public hospitals in New Zealand in October 2020 (Hooton, 2021, October 30). This would indicate a number of 6.24 ICU beds per 100K, which is still low in comparison to the OECD average of 14.1 ICU beds per 100K (OECD, 2022), The low number of ICU beds was given as one of the reasons for NZ lockdown (Manning., 2021).

2.1 Israel

Israel ranks number six in the World Index of Healthcare Innovation (Girvan, 2022). According to the official OECD data, Israel has the second lowest level of mortality from preventable causes, at 68 per 100,000 people, compared to the OECD average of 126 (Statista, 2023). Healthcare is universal and medical insurance is mandatory. The system of free non-profit health plans is financed by payroll tax and general taxation³. The Israel population is divided between 7,069,000 (73.7%) Jews, 2,026,000 (21.1%) Arabs (Muslims and Christians) and 498,000 (5%) of the population is defined as “others” (non-Arab Christians, Baha’i, Samaritans, Karaite Jews, Seventh-day Adventists, Messianic Jews, Jehovah’s Witnesses, and a small percentage of immigrants from the former Soviet bloc, who are not considered by the government as “Jewish”).

Solving a medical labour shortage by immigration is currently discussed within the Israel Ministry of Health, with a possible change in licensing regulations as well as in language requirements (Jeremy, 2021). Twenty-one percent of the Israeli population is foreign-born (OECD, n.d.). Ten percent of nurses are foreign trained, this includes native born Israelis trained in other countries, mostly at Bethlehem University (Palestine)⁴. Interestingly, Israel has a high percentage of male nurses. In 2022 it was 18%, as compared to the world average of 10% (WHO, n.d.). According to a case study of Arab health care workers, almost 45% of Arab nurses are male, compared to only 8.6% of Jewish nurses (Popper-Giveon et al., 2015).

2.2 New Zealand

New Zealand ranks number seventeen in the World Index of Healthcare Innovation (Rigney, 2022). The level of mortality from preventable causes is at 106 deaths per 100,000 people, compared to the OECD average of 126 (Elflein, 2022, April 14). The health care system is universal. All citizens have access to government

³ The official data from the Israel Central Bureau of Statistics was used to draw this information.

⁴ Bethlehem University offers nursing studies in a combination of English and Arabic. Universities in Israel provide nursing education only in Hebrew. For this research the term ‘Palestine’ is used for the West Bank/Judea & Samaria, East Jerusalem & Gaza area

funded services. Approximately one-third of the population has private insurance for non-covered services and copayments (Gauld, 2020). On July 1, 2022, NZ moved to a new national health system (Cabinet, 2023). The most important change are two new health organizations that will work alongside the MoH: the Māori Health Authority and Health New Zealand.⁵ Digitalization of health care, availability of quality emergency and specialist care and health services reflecting community needs and preferences, will be implemented in this new system. According to the NZ official statistics, the current population of NZ is 5, 127 000. The majority, 70%, is of European descent, the largest minorities are 17.4% Māori, 8.1% Pasifika and 15% Asian⁶. The total number of nurses is 55 802, 8% are men and 7% are Māori (Stats NZ, 2023). The health care system is dependent on foreign nurses. According to OECD statistics, in 2021 1,521 foreign trained nurses were approved for a practising certificate⁷. It is not clear, however, if those nurses were already in the country or were allowed to enter during lockdowns. In 2020, 2,444 and in 2022 2,690 foreign trained nurses were reported as receiving a NZ practising certificate.

Even though NZ has a shortage of nurses, there is less than 100% employment for graduate nurses, as stated by NZNO in Section 6. Nursing workforce - Te OhuMaori, the headline concerns: “Less than 100 per cent employment for graduate nurses and not all graduate nurses have access to a nurse -entry-to-practice programme (or equivalent)” (NZNC, 2023, para 4). The formal yearlong New Zealand government-funded programs of support (NETP and NESP) are identified as key factors that enable these newly graduated nurses to successfully navigate their first-year practice (Jamieson et al., 2023). As per NZNO: “Results from Advanced Choice of Employment (ACE) intakes from 2014 to 2017 show that 60 to 70 per cent of new graduates are gaining employment in a NETP or nurse-entry-to-specialist-practice (NESP) programme, leaving approximately 400 new graduates in the ‘talent pool’ each year.” (NZNO, 2023, para 6).

⁵ This may change with the new government

⁶ In the latest NZ census 2023 more than one ethnicity could be chosen.

⁷ In Israel, the nursing approval to practice is called a license. In New Zealand it is called a practicing certificate.

2.3 Nurses

Both NZ and IL have similar numbers of nursing graduates, as seen in Figure 2-1 (OECD, 2021). However, the total number of practicing nurses is very different (OECD, 2022), due to the NZ nursing workforce being subsidized by international nurses (Figure 2-2). In Israel there is no option to apply for a skilled labour visa specifically for nurses, contrary to NZ, that has included nurses in a skilled visa category (Immigration, 2023).

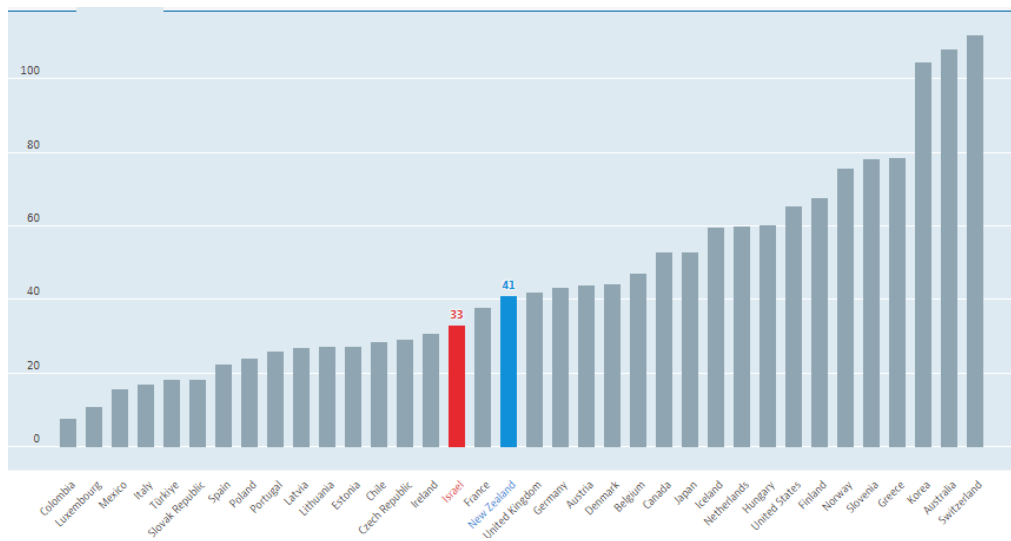


Figure 2-1: Nursing graduates NZ and IL per 100 000 inhabitants

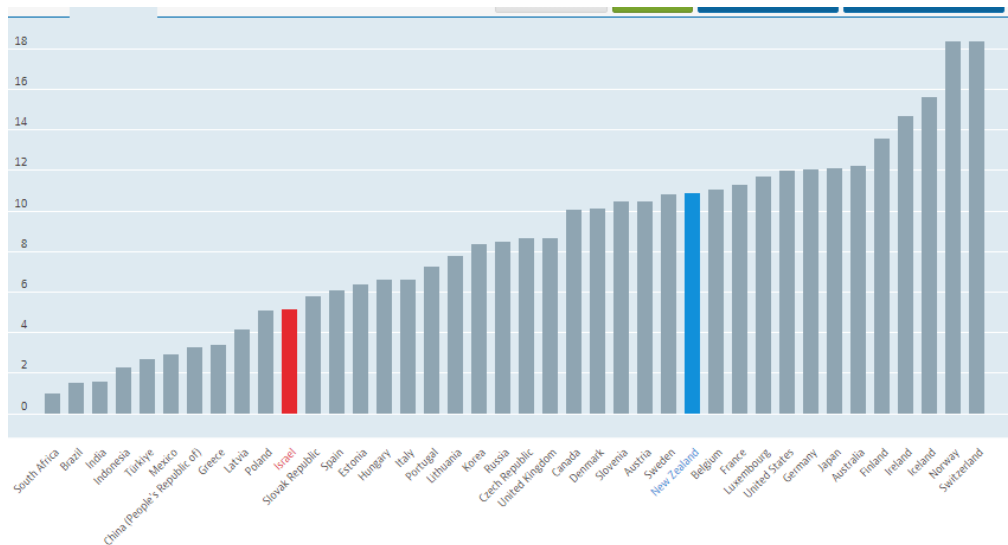


Figure 2-2: Registered Nurses IL and NZ per 1000 inhabitants

2.4 Response to the pandemic

On January 24, 2020, a WHO representative Gauden Galea said of Wuhan “The lockdown of 11 million people is unprecedented in public health history, so it is certainly not a recommendation the WHO has made” (Crossley, 2020, para 3). This statement followed findings of Donald Henderson, an epidemiologist who assisted in the eradication of smallpox, and who argued that it is simply impossible to stop viruses from crossing borders. Instead of lockdowns, a management of the disease is recommended (Inglesby et al., 2006). On January 30, 2020, WHO declared Covid-19 a Public Health Emergency of International Concern (PHEIC). Two criteria must be met for PHEIC, first “the disease must constitute a public health risk through international spread and, second, it must require a coordinated international response in order to control it” (Horton, 2020, p.6).

On March 16, 2020, Neil Ferguson and his team posted a study called ‘Impact of non-pharmaceutical interventions to reduce Covid-19 mortality and healthcare demand’, known simply as the ‘Imperial College paper’ (Ferguson et al., 2020). They represented projections, of different outcomes, based on mitigation or suppression. As a results of this modelling, the majority of the world, together with both Israel and NZ, locked down. (Last, 2020; Wilson et al., 2020; St Once and Campan, 2020; Joffe, 2021). The discussions about the controversies of the lockdown policies will be reviewed in more detail in Chapter Eight.

In this section, a broad overview of the approaches taken by the two countries in response to the pandemic is described. As can be seen in Figure 2-3, Israel had high numbers of Covid-19 deaths with a peak in March 2022. New Zealand started experiencing Covid-19 outbreaks from March 2022 and this trend continued into 2023. The definition of death from and with Covid-19 changed during the pandemic, and as such the data are only indicative.

COVID-19 vaccine doses and confirmed deaths

Our World
in Data

Due to varying protocols and challenges in the attribution of the cause of death, the number of confirmed deaths may not accurately represent the true number of deaths caused by COVID-19.

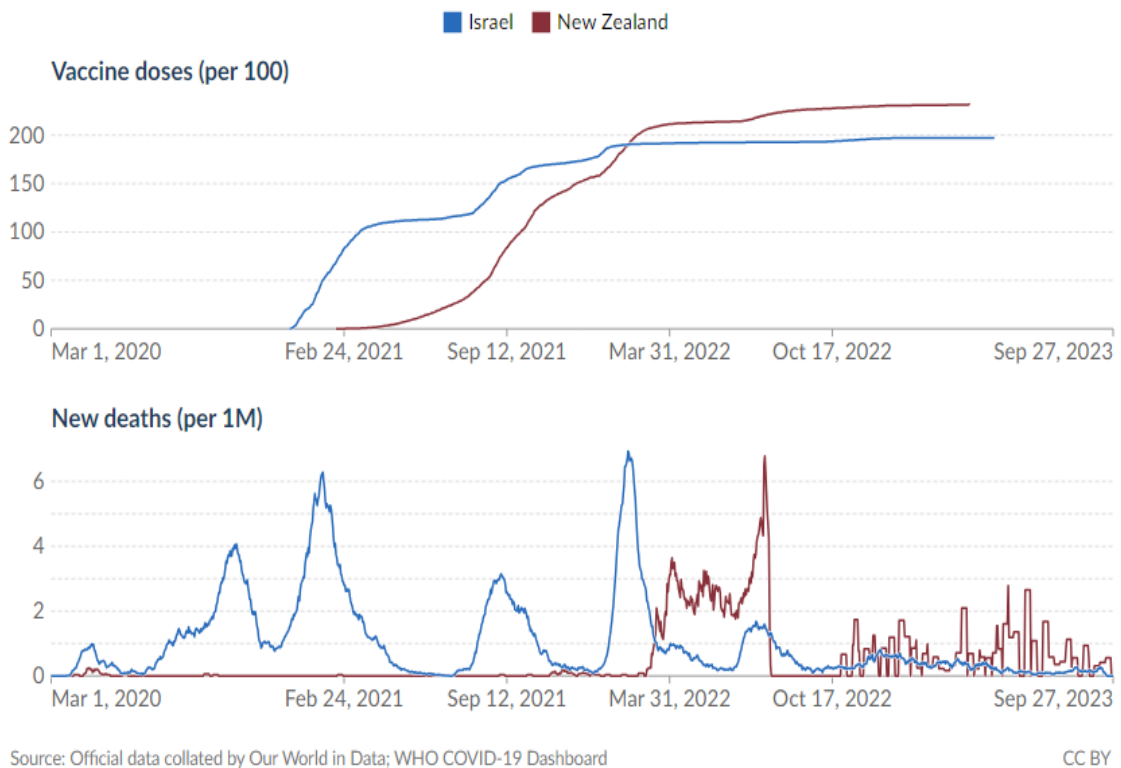


Figure 2-3:: Vaccine doses and Covid death

The Oxford Coronavirus Government Response Tracker (Our World in Data, n.d) published information on 17 indicators of government responses, namely school and workplace closures, cancellation of public events and gathering, face coverings, international and domestic travel, testing and contact tracing, vaccination, and income support. The variations in those indicators illustrate the chaos on the world stage during the three years of the pandemic. The global fight with one virus delivered floods of contradictory mandates. The Stringency index specifically for Israel and New Zealand, two countries in my case study, is included in Figure 2-4. This index records the strictness of government policies. The higher the score the more strict the response. It does not mean the results were better or worse. It simply shows the timeline of various policies implemented by the governments.

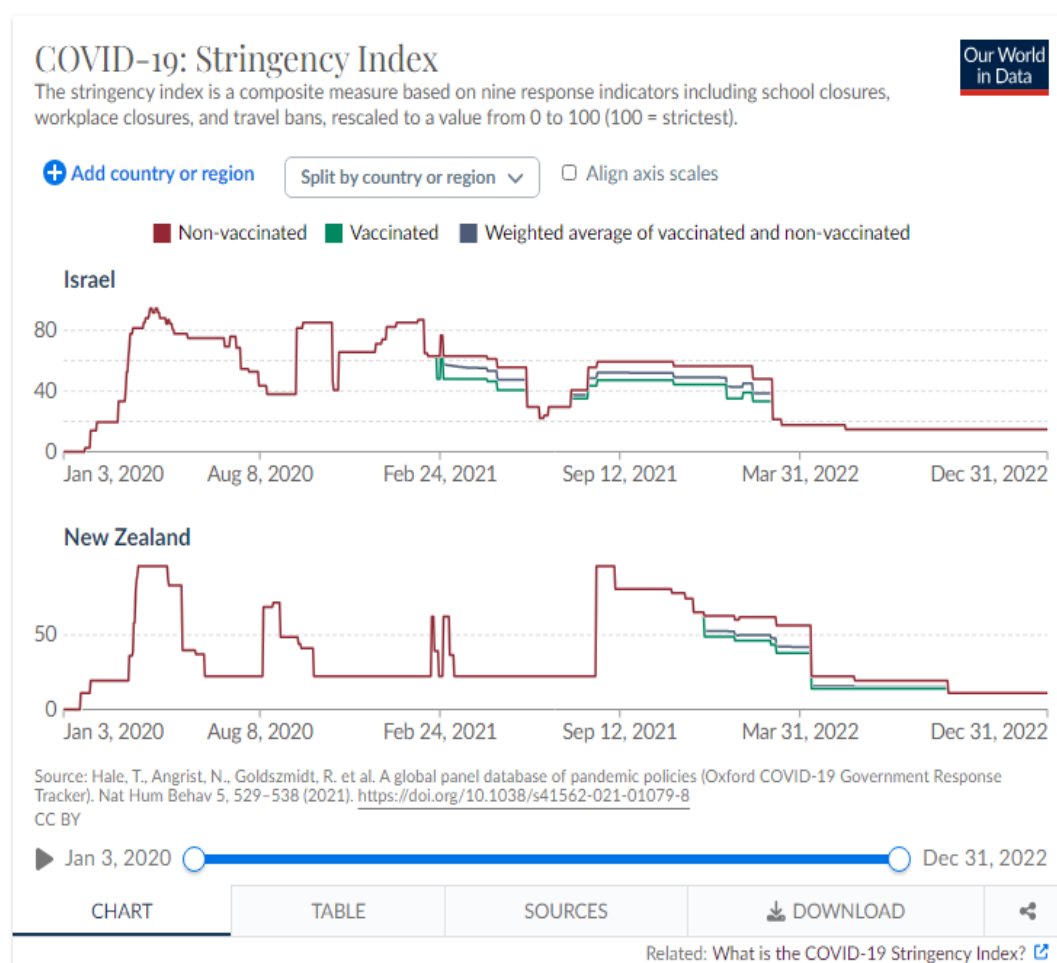


Figure 2-4: Stringency index Israel and NZ (Our world in data, 2022)

2.4.1 Israel

Data from Worldometer (Worldometer, n.d.), summarized in Table 2-2, provides an overview of the pandemic situation in Israel. Numbers of Covid-19 cases, deaths and case fatality rates in each pandemic year are provided until May 5, 2023, when WHO announced the end of the state of global emergency (WHO, n.d.a). The data are only illustrative due to changes in testing rules over the last three years (Pitzer et al., 2021; Hallford et al., 2022). As Karanikolos & KcKee (2020) discussed, testing depended on resources, the need for tests such as for travelling, or attending work. PCR testing and cycle thresholds differed between countries, and even laboratories within the same country (Jamal et al., 2022; Vogels et al., 2020)

Table 2-2: Covid-19 data for Israel

	2020	2021	2022	2023 till 5/5	Total
Covid-19 positive cases	425,670	965,496	3,372,880	59,220	4,823,266
Death from/with Covid-19	3,373	4,878	3,781	468	12,500
Case Fatality Rate	0.79%	0.51%	0.11%	0.79%	0.26%

Israel closed its border for non-citizens on March 14, 2020, and a ‘National state of emergency’ was declared on March 19 (Bar-Siman-Tov, 2020; Maor et al, 2020). The government issued new regulations often, gradually shutting down the public sphere and implementing social distancing measures. All non-essential businesses were closed, schools switched to distant teaching (Last, 2020). By early April, most public activities and social gatherings had been banned and a nationwide lockdown was enforced (Jaffe-Halon et al., 2020). Full lockdowns came into effect during religious holidays, namely April 7-16, 2020 (Passover), and September 23-October 18, 2020 (Yom Kippur-New Year). The third full lockdown, from December 27, 2020 - January 31, 2021, included a hermetical seal of the sky, a complete ban on incoming and outgoing flights in January 18-31, 2021. This last lockdown came during the wave of B1.1.7 [UK] variant, and was characterised by a high rate of transmission, and coincided with mass vaccination (Lyngse et al., 2021). A vaccination passport (green pass) with various restrictions for the unvaccinated was in effect for one year, from February 21, 2021 till February 7, 2022. “The aim of the pass is to encourage citizens, including those at lower risk of severe Covid-19 disease, to receive vaccination in a national attempt to achieve 95% immunization rate, presumably a sufficient percentage to reach herd immunity” (Wilf-Miron et al., 2021, p.3). Unvaccinated citizens, including nurses, could work and participate in daily activities if they produced a negative PCR test. From November 1, 2021, vaccinated tourists were allowed into Israel, from February 20, 2022, the border opened for unvaccinated foreigners as well (Spiro, 2022).

Israel has a unique trauma system designed to manage mass casualty incidents, characterized by a centralized national organisation, and this system was quickly

reorganized in order to accommodate the needs of the pandemic (Bala & Gottesman, 2022). Home Front Command, part of the Israeli Defence Force (IDF), specializing in civilian protection, operated several Covid-19 testing locations, and provided logistical support by supplying personnel for the distribution of food, medication, and essential services around the country. Over 1,400 soldiers were allocated to a pandemic response call centre, which provided real time information to civilians in several languages (Hebrew, Arabic, Russian, Amharic, English) from March 2020 (Glatman-Freedman et al., 2020).

By July 2020 the army operated 28 quarantine hotels, there were two types of facilities, recovery, and isolation. One for Covid-19 positive people, who could not isolate at home due to a variety of reasons. Those hotels were ‘fun’ places, as explained by Shuster (2022) in, ‘Yoga, singing, dancing inside a coronavirus hotel’, with patients able to be together, support each other, until two negative PCR tests released them. Those hotels were run, as IDF spokeswomen Levin explained, “under the assumption that if everyone inside is already infected they can’t re-infect one another” (Nadworny, 2020, para 2).

The second type of hotels were isolation for international travellers or people who were in a contact with Covid-19 positive individuals and needed isolation. Those were the ‘hard’ hotels, people were locked in rooms, unable to exit. Those hotels “exemplify how remote medical technology and digital medicine together enable a new techno geography of care, where care and abandonment are inextricably linked” (Bar-Lev, 2023, p.698). Occupants of the Covid-19 hotels needed two negative tests to escape, some reported staying in a hotel many weeks with never ending positive results, experiencing the dissonance between feeling healthy and having formal tests labelling them as sick and dangerous (ibid). With rising numbers of Covid-19 positive cases the option of home isolation was introduced (Last, 2020). On February 25, 2021, electronic bracelets for home quarantine, as a pilot project, were offered upon arrival at the Ben Gurion airport, the only point of entry into Israel. The corona hotels were disbanded in May 2021.

As discussed by Levy (2021), the general population's compliance with the lockdown and social distancing requirements was checked via a smart phones' location application. The use of military intelligence operations in the surveillance of civil population was controversial. In fact, it was noted that "no other democracy used its intelligence agencies to cope with Covid-19 to the same extent as Israel. Methods originally used to control a hostile population were adopted, such as the IDF-led monitoring of the potential for a popular revolt, gathering information about Arab citizens, and monitoring social media" (p. 3).

Israel has a mandatory army service, three years for males and two years for females. IDF field battalions have their own nurses, who can assess a soldier's condition and consult with army physicians if there is a need for further treatment. "In the IDF, the nurses have greater authority to provide treatment than their civilian counterparts."(Lappin, 2019, p. 20). Military nurses assist in field hospitals, which take part in emergency help in countries hit by natural disasters, such as earthquakes (Haiti, Nepal) and tsunamis (Japan). Due to Israel's neutrality in the current Russia-Ukraine war, humanitarian aid to Ukraine was organized by hospitals, not by the army (Government IL, 2022). 'Shining Star' hospital, named after former Israeli prime minister Golda Meier, originally from Kyiv, was established in Ukraine (Ministry of Foreign Affairs, 2022). IDF medical corps field hospital is one of 17 facilities given the highest accreditation by WHO to provide consultation and extended trauma treatments (Alpert et al., 2018). One field hospital took part in a humanitarian mission 'Operation Good Neighbour', assisting civilians from war torn Syria (Gross, 2018).

Military nurses and doctors as well as other IDF personnel were used from the start of the pandemic in hospitals (Petersiel, 2021). In Israel, dual-use facilities, parking lots during peacetime and fully functioning fortified underground emergency hospitals during war, solved the challenges of Covid-19 overflowing wards (Leshem et al., 2020). Covid-19 positive patients were moved underground in Rambam, Haifa and Sheba Medical Centre in Tel Aviv (Halberthal et al., 2020). The Sheba underground Covid-19 hospital was divided between non-ICU, Level 1 ICU with 77 beds (ECMO trained staff), Level 2 ICU with 62 beds (ventilators, intermediate care) and Level 3 ICU with 188 beds (ventilator, medical support). as per Leshem et al.

(2020). An InTouch Telepresence robot allowed the patient to see a human face (on the monitor), while medical staff were covered in full PPE (Pilosoph et al., 2021). In May 2021, with the start of rocket attacks from Gaza, the underground coronavirus ward turned within 24 hours into a bomb-shelter neonatal unit (Sheba, n.d).

During Covid -19 pandemic health care professionals were relocated within the public health sector, while extra hours, cancelling leave, and recruitment of medical students and student nurses, was organized (Waitzberg et al., 2022). The pooling of nurses from different departments to Covid-19 wards was challenging, as will be discussed in detail in Chapter Seven. Telemedicine was utilized. As Dr Galia Barkai explained from Israel's first virtual hospital, "we transformed all 200 outpatient clinics to video clinics and finished year 2020 with more than 60,000 video visits" (Sheba, 2021, para 2). Virtual family visits were organized for Covid-19 wards, but soon it was understood that "digital visiting hours" were not enough and visitors in full PPE were allowed in Covid-19 wards (Pilosoph et al., 2021, p.18).

As can be seen Israel took advantage of the country constant emergency preparedness, implemented strategies for containing it's citizens in lockdowns by surveillance, physical as well as virtual, and later with the assistance of a vaccination (green) passport. Army resources were used to assist the health care workers and to cooperate with the secret services in securing the obedience of the citizens.

2.4.2 New Zealand

Due to the relatively low numbers of Covid-19 positive cases, NZ had no need to set up special Covid-19 hospitals. Table 2-3 presents basic data from Worldometer (n.d.) on Covid-19 positive cases, death, and the case fatality rate (CFR) in each pandemic year, until May 5, 2023. In April 2020 it was predicted the CFR of the virus would be 1%, with a projection of 14,400 deaths in NZ (Baker et al., 2020). As such a 'Covid-19 elimination strategy' was put in a place, which led to a rapid decline of cases, and low community transmission (Murdoch, 2020). Genomic sequencing was used to discover clusters of Covid-19 positive cases, the goal being, as epidemiologist Amanda Kvalsvig from University of Otago said, "zero community spread" (Lewis, 2020, para 2).

Table 2-3: Covid-19 data for New Zealand

	2020	2021	2022	2023 till 5/5	Total
Covid-19 positive cases	2,162	11,956	2,106,070	212,662	2,332,850
Death from/with Covid-19	30	29	3411	688	4158
Case Fatality Rate	1.39%	0.24%	0.16%	0.32%	0.18%

NZ closed its borders on March 20, 2020. On March 25 a state of emergency, Alert level 4 was declared, which on April 28 changed to level 3. On June 8 there were no active cases in NZ. On August 12, 2020, Auckland went back to Alert level 3 until October 8, 2020. A four-tiered alert system was in place between March 2020 and December 2021. Level 1 was no restrictions, level 2 limited gatherings, level 3 indicated the community transmission was happening and people were instructed to limit their contacts to a support bubble. Physical distancing of one meter in schools and workplaces as well as two metres on public transport was enforced. Schools and Early Childhood Education were open but with limited capacity. Health care services used virtual consultations whenever possible. In level 4 only essential movement and business were allowed. Schools closed down (Auckland reporter, 2021). This system was replaced with a traffic light system, which ended on September 26, 2022 (Ministry of Health, n.d.)

The initial fight with the virus happened at the border. On February 28, 2020, at Whangaparaoa Peninsula defence force training facility, the first NZ quarantine facility, was created and used 64 campervans for 157 returnees from Wuhan, China. As per the memorandum ‘Suppression and mitigation strategies for Control of Covid-19 in New Zealand’ from March 25, 2020, the plan was to keep the cases to absolute minimum (James et al., 2020). The benefits of this strategy were outlined as delaying the epidemic for long enough to get a vaccine (Covid19, n.d). As Bhattacharya (2022b) argued, “New Zealand’s strategy relied entirely on the development and testing of a vaccine outside of its borders. Indeed, the vaccines could never have been tested in 2020 and 2021 within New Zealand because there were insufficient Covid-19 cases to run a meaningful randomised trial. In effect, New Zealand relied on the

fact that other countries did not adopt a Zero Covid policy to create conditions that permitted New Zealand to escape from the Zero Covid trap it embraced until spring 2022” (p.2).

By July 2020 Managed Isolation and Quarantine [MIQ] facilities were established in five regions (Gray et al., 2022) to prevent the virus from entering the country. These were run by the NZ professional army, navy, and air force personnel from August 2020 until March 2022. From October 5, 2020, travelers to NZ needed to obtain a MIQ voucher from the Managed Isolation Allocation System. By January 19, 2021, 100 000 travelers passed through MIQ. On August 2021, with the Delta outbreak, NZ moved to alert level 4. When the Omicron variant arrived in December 2021, NZ moved to a mitigation strategy with 87% of the population vaccinated (Kung et al., 2023). It became obvious the airborne virus cannot be stopped at the border, and as such a practice of reducing its impact was put in a place. Three months later, on March 24, 2022, the MIQ voucher booking system closed down (Clifford, 2022). On July 1, 2023, MIQ was abolished (Health New Zealand, 2023). It was determined by the NZ High Court “that the MIQ ‘lottery’ system was an unjustified limit on the fundamental right of New Zealand citizens to enter the country. (para 1). In June 2021, NZDF medical officers joined the Australian-led response to Covid-19 in Fiji (NZDF, n.d). In July 2021 the navy transported Pfizer vaccines to one of the most remote places in the world, in Fakaofu, Nukunono and Atafu atolls of Tokelau, utilizing inflatable boats and helicopters. Ten NZ army personnel joined Capital and Coast District Health Board, Tu Ora Primary Health Organisation, Whitireia Polytech nursing students and Wellington Free Ambulance to vaccinate at Sky Stadium in Wellington from August 27, 2021, till September 4, 2021 with nearly 7,000 people vaccinated (Army, 2022). However, the pandemic had a negative effect on the soldiers. The army reported a 52% increase of soldiers leaving, with 1800 out of 7600 personnel working at MIQF being referred to NZDF psychologists (Walters, 2022).

NZ took full advantage of its geographic location and secured its borders against the permeation from the virus. To secure the obedience of the citizens Alert levels 1- 4, and latter traffic light system, with various restrictions put in a place, later followed by a vaccination passport. It would seem the vastly different approaches by

Israel and NZ had, surprisingly, similar result. SARS-CoV-2 could not be conquered nor stopped.

2.5 Vaccination approaches

In this section the public roll out of vaccinations is discussed across the two countries, since variations in the approach to the vaccination strategy, as well as in the vaccination mandates, directly affected the nurses and as such require further examination.

Every search about any topic that includes Israel brings up the long-standing issue of the Israeli – Palestine conflict. Pandemic times were no different. During the Covid-19 era there was a controversy over whether Israel was obliged to supply PPE to Palestinian hospitals and to receive Covid-19 positive patients for treatment not available in Palestine. With the start of the vaccination drive, the Israeli plan to vaccinate or not to vaccinate Palestinians was discussed in the mass media as well as in academic journals. (Abu Jahal, 2020; Akram & Krauss, 2021; Alkhalidi et al., 2022; Ayyash, 2022; Boxerman, 2020; Dahdal et al., 2021; Mahmoud, 2020; Majer et al., 2022). The outcome of vaccination in Palestine can be seen in Table 2-4, adapted from SWFI (2021).

Table 2-4: Israel/Palestine vaccination

Figure (dated Sept 9, 2021)	Israel	Palestine
Population	9,227,700	5,101,414
Covid-19 recorded cases	1,140,000	393,777
Population infected	12.35%	7.72%
Covid-19 death	7,261	4,048
Covid-19 death rate by population	0.08%	0.08%
Vaccinated (2 doses)	60.80%	17.60%

As such, I will discuss the vaccination organization and statistics in Israel, New Zealand, and Palestine. Numbers retrieved from Worldometer show an

interesting picture of the speed in vaccinating the population. New Zealand and Palestine have a similar population size, approximately 5 million, Israel has 9,23 million (Table 2-5)

Table 2-5: Vaccination Israel, New Zealand, Palestine

Half million vaccinated	Time	Dates
Israel	8 days	Dec 20-28, 2020
New Zealand	4 months	Feb 14-Jun 8, 2021
Palestine	5 months	Feb 2-Jun 30, 2021

Israel's speed in the mass vaccination campaign in late 2020 was unique in the world. As will be explained later, in Chapter Seven and Eight, the New Zealand situation was more complicated, reflecting a combination of waiting and initial reluctance to take vaccines without an actual threat on the ground from the virus. The "Our World in Data" ⁸report (Figure 2-5) shows the slower uptake in New Zealand compared to rapid intake in Israel, followed by first booster in June/September 2021.

⁸ Our World Data provides data and statistic on various topics by the Global Change Data Lab, and is freely available: <https://ourworldindata.org/>

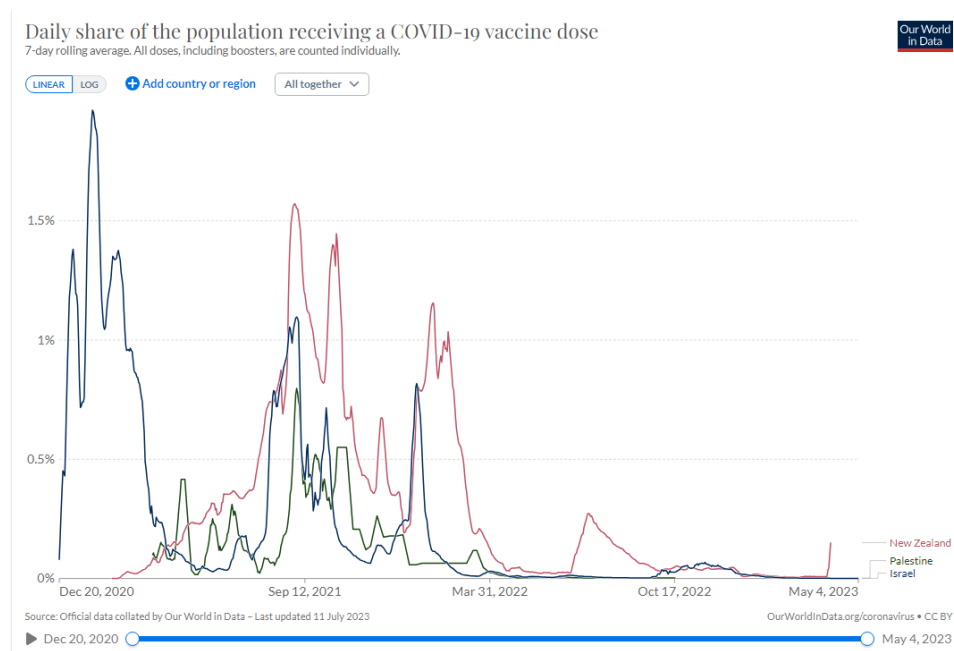


Figure 2-5: Vaccination Israel, New Zealand, Palestine (Data, 2023)

The Israeli population demonstrated low interest in the second booster in December 2021, while New Zealand had a visible uptake of this fourth vaccine (third booster). Palestine follows in Israel's footsteps, basically stopping vaccinations after March 2022.

2.5.1 Israel's vaccination

To better understand the numbers, I will first explain the vaccination process in Israel as I experienced it. On December 8, 2020, Israeli MoH decided to independently approve, as a pioneering regulator, Pfizer's product, before the world (FDA, 2020). This was based on Israeli's 'Import approval article 29(a)(9)', which in case of an epidemic or contagious disease, as an exception, allows the importation of medical products without registration. On December 9, 2020, the first shipment of Pfizer vaccines arrived in Israel ("First Pfizer Vaccine", 2020). FDA gave an emergency approval for the Pfizer-BioNTech Covid-19 vaccine two days later, on December 11, 2020 (FDA, 2020). The first vaccinated Israeli was the PM Benjamin Netanyahu, the shot was televised on December 19. The official vaccinating drive, 'Operation getting back to life' started on December 20, 2020. In twelve days, Israel administered 11 doses per 100 citizens, the highest rate in the world at that time. The

next highest was Bahrain (3.5 doses per 100) and UK (1.4 doses per 100) (Rosen, Waitzberg, & Israeli, 2021). By February 2021, over 5 million Israelis had received at least one dose of Pfizer. The question how and why a relatively small Israel population received a priority supply from Pfizer is still speculated about, especially since the official Pfizer agreements are mostly censored. In December 2022 the High Court asked for a release of the paperwork based on a petition from Dr Joseph Zernik, under the Freedom of Information Act (The Freedom of Information Law, 1998). The answer from the MoH was “we can’t locate the signed agreement with Pfizer” (Shir-Raz, 2022b, p.1). It seems PM Benjamin Netanyahu made a special deal with Pfizer CEO Albert Burla (Baker et al., 2021; Israel & Pfizer, 2020). Paying more money than the EU, as well as promising to provide fast epidemiological data on vaccine effectiveness, seem to be the main reasons for Pfizer granting Israel priority (Shinar, 2022). Whether Israel provided Pfizer with accurate data is questioned by investigative journalist Yaffa Shir-Raz (2022c), as well as by ‘The Israeli Public Emergency Council for the Covid-19 Crisis’, a group of scientists with unofficial views towards the pandemic (PECC, 2022).

Israel citizens and permanent residents are required to have mandatory health insurance from one of four available national health insurances companies, namely Clalit, Maccabi, Leumit, and Meuhedet (NBN, 2024). Those health plans were able to schedule hundreds of thousands of vaccination appointments quickly and efficiently for their members via call centres, mobile apps, and organizational websites. Each citizen has a unique ID number which gives them access to their health care records. Nurses were authorized to assess each individual and determine if the criteria for vaccination were met. In addition to nurses, supplemental staff were recruited from the Home Front Command of the Israel Defence Forces (IDF) to assist in vaccination centres. Regulations were changed for medics and paramedics, so that they too could administer vaccinations (Glied, 2021). The IDF was responsible for ultra-cold storage of the vaccines in a central location, transporting those vaccines to a large number of sites, and also organizing vaccination sites in small localities (Kirby, 2021). The initial target groups for vaccination were people aged 60 and over, nursing home

residents, people at high risk due to serious medical conditions, and front-line health care workers (Rosen et al., 2021).

When Israel received Pfizer vaccines, the storage requirements of minus 70 degree Celsius were challenging. The vaccines arrive to the point of vaccination in trays containing 195 vials and after towing, it expired in 5 days (Rabinovitch & Scheer, 2021; Rosen, Waitzberg, & Israeli, 2021). An agreement was reached with Pfizer to split the boxes into more manageable pizza size container. As the Health Minister noted, “Israel is the first country in the world to repackage to allow maximum public accessibility to the vaccine... Workers operate inside refrigerators at temperatures of two degrees. That way we will reach every point in the country without losing expensive vaccines. This is how we make Israel the world leader in vaccines” (Adler, 2020, para 2). Being a nurse working in a vaccination tent (Figure 2-7), I had new instructions on every shift regarding eligibility for the vaccine. At the end of the day people, who did not have an appointment, would wait to receive unused vaccines (Sokol, 2021).

Facebook and WhatsApp groups shared posts on where to get leftover vaccines. The official policy was one of flexibility in order to avoid waste of towed doses. It was noted that “Israel’s health infrastructure makes this kind of organized chaos possible. Even if you’re escorting your grandmother to her vaccine appointment and there are doses available, you’ll quickly be logged into the system ... When you plan, for example, how the cold chain will look, how many vaccines you will get, you need to make rapid adjustments. And we are good at that” (Kirby, 2021, para 3).



Figure 2-6: Tel Aviv ready for vaccination, December 19, 2020

On February 28, 2021, Israel introduced its “green pass” program for the vaccinated and those recovered from Covid-19 infection (Corona Health, n.d). This smart phone application allowed access to gyms, hotels, international traveling without isolation, and other activities. Unvaccinated, or people without papers proving their recovery status, needed to provide a PCR negative test, valid for only three days, instead. On October 1, 2021, only people with a booster were classified as vaccinated and eligible for a green pass (Corona Health, n.d). As such there were three categories of citizens: unvaccinated, those with expired vaccinations, and vaccinated. The vaccination mandate was cancelled on March 1, 2022.

2.5.2 New Zealand vaccination

New Zealand approved Pfizer vaccines on February 3, 2021, and received its first batch of doses on February 15, 2021 (Crump, 2023). Five days later 100 nurses were vaccinated and by April 7 a total of 90,286 vaccine doses were administered (Global Health, 2021). On June 17, 2021, Jacinda Ardern announced: “New Zealanders over 60 will be offered a vaccination from July 28” (Ardern, 2021, para 1). It should be noted that on the same day, Israel started vaccinating with the third Pfizer doze, the booster. When the Delta outbreak began, New Zealand had the

slowest vaccine uptake in the OECD, with just 20 per cent of eligible people fully vaccinated (MacDonald, 2021; Nippert, 2021).

Nurses in NZ needed special training to be allowed to administer the vaccine. A Vaccinator Bridging Course was available for the Pfizer vaccine to fast-track health care professionals (TeWhatuOra, n.d). The vaccinators were ready and trained by April 2021, but there were no doses to be distributed. “Somewhere between May and now [September], while Delta was in our MIQ and causing countries around the world to lock down, the NZ Government decided to slow down delivery of vaccines and slow down our rollout, an inexplicable decision given the nature of Delta and threat we were facing... the only option we have to combat Delta is a long lockdown.” (Bishop, 2021, p.2).

Under the Covid-19 Public Health Response order, from November 1, 2021, nurses were required to be vaccinated to work, from February 25, 2022, this order covered the booster as well. A vaccination status check was in the competence of the employer. “Failing to observe this order leads to disciplinary processing under the Health Practitioners Competence Assurance Act 2003” (NZNC, n.d., para 8). This order was cancelled on September 26, 2022.

From November 16, 2021, till November 15, 2022, a strict vaccination mandate ‘no jab no job’ was in effect (Covid19, n.d.). “My Vaccine Pass” was an official record of a vaccination status for anyone above the age 12. It was mandatory for entering events, hospitality and international travel. It was not needed for essential services (Healthify, n.d). On July 2022 the border opened for the vaccinated (Immigration NZ, 2022).

2.5.3 Palestinian (Gaza, East Jerusalem, West Bank) vaccination

For the purpose of this thesis, the definition of ‘Palestinians’ is taken from United Nations Relief and Works Agency for Palestine (UNRWA, n.d.), counting Palestinians together with Palestinian refugees, living in refugee camps in Palestine (Gaza, West Bank and East Jerusalem), for a total of approximately 5 million people. Israeli Arabs, approximately 1.6 million, are included in Israeli official data.

Muhammad Ayyash argues that the slow vaccination in Palestine was due to Israel's settler colonial sovereign violence and apartheid (Ayyash, 2022). Contrary to Israel, which obtained enough vaccines in a deal with Pfizer (Pfizer-Israel 2020), Palestine struggled to get enough doses for its population. The situation on the ground was complex. "In East Jerusalem, the Palestinians received full access to vaccines, as they have Israeli residency status and health insurance; in the West Bank, Israel vaccinated Palestinian workers with Israeli work permits; and Israel permitted the delivery of vaccines donated by international actors to the area" (Lehrs, 2021, p.2). The Gaza strip includes Palestinian refugee camps with the highest population density in the world (Reuters, 2021a). According to WHO, Gaza has 2.57 nurses per 1000 people (WHO, 2020). The data for health care workers in the West Bank and East Jerusalem are challenging to retrieve, since Palestinian nurses and doctors work in Israel as well and some hold licenses in both countries. "Palestinians account for 13,000 nurses and 8,140 doctors in Israel, making up 23 percent and 21 percent of the workers in these sectors respectively" (UNRWA, n.d., para 3). Palestinian health care workers, with work visa for Israel, were eligible for a priority Covid-19 vaccination together with their Israeli counterparts.

According to Amnesty International: "Under the Oslo Accords signed in the 1990s, the Palestinian Authority is responsible for providing health care in the territories it administers. But the interim peace agreements say both sides should cooperate in combatting epidemics" (Amnesty, 2021, p.3). Based on the Fourth Geneva Convention, Article 56, "The Israeli Government must uphold its obligations as the occupying power, under international humanitarian law and human rights law, to provide the highest attainable standard of physical and mental health to the population of the OPT [Occupied Palestinian Territory] without discrimination," (Amnesty, 2021, p.9).

The Palestinian vaccination campaign began on February 2, with 2000 doses of Moderna vaccine donated by Israel (Reuters, 2021a), later 3000 more Moderna vaccines were sent (Abu-Odah et al., 2022; Krauss, 2021). Ten thousand doses of Sputnik vaccines donated by Russia were received on February 4 in West Bank via Israel (Ayyub & Al-Mughrabi, 2021). Palestinian Authority officials sent 2000 of

those doses to Gaza through Israel on February 17. A request by Israel to swap the vaccines for information about bodies of two Israeli soldiers, held by Hamas in Gaza, met with international uproar (Akram & Krauss, 2021; Holmes & Balousha, 2021) and as such Israel released the vaccines without getting intelligence on its soldiers. On March 8 Israel started vaccinating all Palestinians with Israeli work permits and within one week reached approximately 100,000 workers (Boxerman, 2021). On March 17, 2021, the Palestine Authority received 37,440 Pfizer and 24,000 Astra Zeneca doses from COVAX (AlJazeera, 2021; Unicef, 2021).

The reluctance to take vaccines was another problem Palestine faced. “It was attributed to two overall factors: 1) the spread of false rumours, misinformation, and conspiracy theories they received about the vaccine on social media and 2) the mistrust toward the vaccines the government purchased” (Abu-Odah et al., 2022, p.42). In a study conducted in early 2021 in the West Bank, only 37.8% of Palestinian health care workers were willing to take the vaccine (Maraqa et al., 2021). Those working in Israeli hospitals needed twice weekly negative PCR tests, if they chose not to vaccinate, the same as Israeli health care workers. Hesitancy towards vaccination was reported in studies conducted in the West Bank and Gaza (Al-Kafarna et al., 2022; Alya et al., 2022; Majer et al., 2022). Due to the low enthusiasm for getting the Covid-19 vaccine, the “Palestinian government has resorted to reactivating the Palestinian Public Health Law (No. 20-2004), which permits the government to vaccinate compulsorily” (Abu-Odah et al., 2022, p. 54). On August 23, 2021, the vaccination mandate started. “Since the measures were announced the number of people that have been fully vaccinated in the West Bank has increased from 370,000 to over 865,000. In Gaza, the number quadrupled from 70,000 to almost 300,000” (Duer, 2022, para 3). Vaccination mandates stopped in Palestine in March 2022.

2.6 Summary

The Covid-19 pandemic reactions by Israel and New Zealand were based on their system’s capacity as well as the magnitude of the positive cases (Beattie and Priestley, 2021; Kaim at al., 2021). As can be seen in the number of ICU beds, in February 2020 NZ did not have the capacities to deal with the virus. As such, NZ

implemented a plan of elimination of the virus, to shut down the country, while waiting for a vaccine or treatment (Baker et al., 2020; Blair et al., 2022). Since NZ depends on the work on foreign nurses, the issue of closed borders will be discussed further in more detail. According to OECD (2023) in 2020 there were 2444 foreign nurses who received a license to practice, in 2021 the number went down to only 1521 (OECD, 2023).

Israel opened Covid-19 wards from February 2020, and shifted personnel around, heavily depending on the IDF, both for soldiers to secure the lockdowns and Covid-19 hotels as well as army medical personnel with assistance in the hospitals and during the vaccination drive (Rossman et al., 2021; Leshem et al., 2020). Hospitals did not close down if staff became infected. Electronic surveillance was put in place to assist epidemiological tracking (Amit et al., 2020; Marciano et al., 2021). New Zealand depended on the army to hold the IMQ facilities and to transport vaccines to remote areas. Queenstown Hospital closed down due to a Covid-19 positive nurse (Houlahan, 2020) and Auckland's North Shore hospital set aside a building for positive patients (Martin, 2021).

2.7 Conclusion

The differences in the health care systems correspond to the approach towards vaccination. Israel vaccinated with a huge speed and unvaccinated workers were allowed to remain in their workplaces. NZ vaccination was slower and the government mandated vaccination for all health care workers. It can be speculated that the fast reaction leads to a faster cool down. While NZ was still vaccinating in 2023, Israel basically stopped at the end of 2021.

It is interesting that the male dominated culture of Middle East does not correspond in the statistic of male and female nurses. In Israel there are 18% male nurses compare to 8% in NZ, while the world average is 10%. This would indicate the advantage of working in a health care, where strict structure does prevent discrimination. The differences and similarities in the health care systems and what role they play in the nurses' work conditions will be further explored in Chapter Six, Secondary Sources, and in Chapter Seven, Interviews of Nurses.

Chapter Three: Methodology

“Almost a year now into the emergency, we should consider the events we have witnessed within a broader historical perspective.” (Agamben, 2021, p.7)

The pandemic did not happen in a vacuum, as Agamben reminds us. Looking back over the three years of pandemic and post pandemic life, nurses were initially featured in the media as the frontline heroes working in the face of danger, as the pandemic continued the media focused on nursing shortages and then on nurses unwilling to be vaccinated. From an insider view as a nurse, I understood the confusion that nurses experienced, because I was one of them. Nurses’ stories are real and should be heard. Understanding the experiences of nurses during the Covid-19 pandemic needs a social approach to analysis. It requires scrutiny of personal views, political views, and organisational standpoints for the whole picture of what happened to nurses during the pandemic to be made clear. Therefore, Critical Social Theory (CST) seemed an obvious choice of theory to support an investigation of this kind.

This chapter describes the use of CST framework and the methodologies chosen to guide my research. Because there were layers of narratives, clearly discursive in nature, a variety of approaches within the paradigm of CST were used to analyse how the pandemic discourses influenced the support received by nurses during the Covid-19 period. The influence of Kant, Marx and Freud on CST are discussed, as well as the development of Critical Discourse Analysis (CDA) from the Frankfurt School and Foucault’s archeology and genealogy. CDA studies the relationship between discourse (as action and text) and the influences of socio-political and cultural factors on society. What people do and how certain discursive practices are shaped and reshaped through power relations in society are examined (Nasser, 2020). In the analysis Fairclough’s socio-cultural approach (2015), based on a framework of interpretation of situational context, was used and is illustrated in Figure 3-1.

The panopticon effect: Covid-19 discourses and the nurse

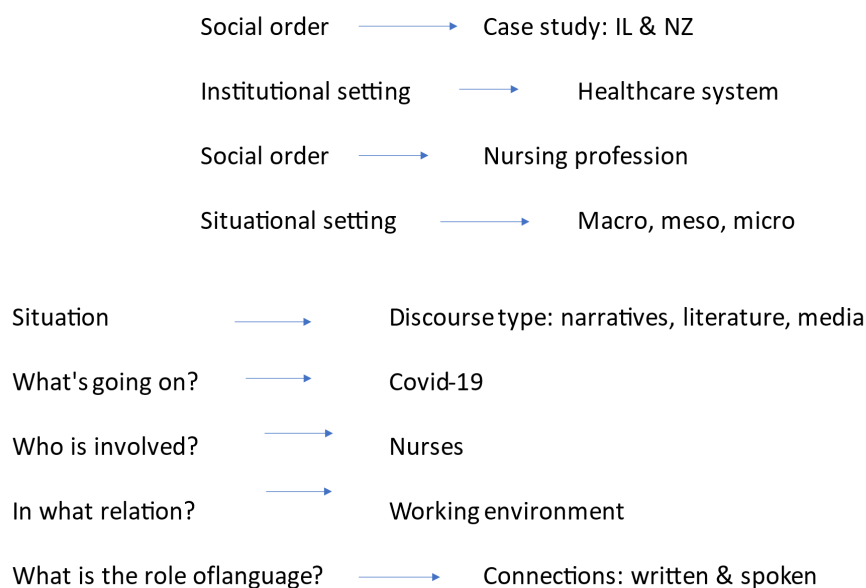


Figure 3-1: *Situational approach*

Fairclough's work is strongly aligned with Foucault's view on knowledge and power (Sundberg, Dahlborg & Lindahl, 2023). His three-dimensional framework examines the sociocultural construction of language, how power relations influence it, and outlines the ways in which language is used to both reflect and shape social reality, ideologies, and power relations. His model consists of three interrelated dimensions: text, discourse practice, and social practice. Textual analysis involves studying language patterns, vocabulary, and rhetorical devices used to uncover how language constructs meaning. It examines the social practices and institutions involved in the creation and dissemination of discourse. Fairclough (2015) is interested in understanding how power is exercised through discourse, looking at who has the authority to produce and circulate certain types of knowledge and how this contributes to the construction of social reality.

When considering nurses' experiences during the Covid-19 era, the complexity of the pandemic and how the discourse is played out around the nurses, it is important to note that nurses do not work in isolation; their work is directed by professional regulation, organisational directives, and patients' needs. In turn,

organisations are directed by governments. Fairclough's argument is that nothing happens in isolation, and everything is influenced by something else (ibid.). The relationship, therefore, between the levels of organisation and the discourses are important to examine to understand the situation of nurses during the pandemic. It was hoped that Foucault's panopticon effect (1977) would assist in understanding how the control over society played out in the discourse, and what effects this had on nurses.

To answer the question: **'What are the experiences of nurses working during the Covid-19 pandemic, and how were they supported?'** I chose the case study of New Zealand and Israel because of their divergent views and approaches to the pandemic, and because I was familiar with both countries. In keeping with Fairclough's guidance on power and discourse (Fairclough, 2015), data was collected across levels of social order, these being global, country, and individual nurses. This is explained in more detail later in this chapter.

3.1 Critical Social Theory

"One of the lessons of the Hitler period is the stupidity of cleverness"
(Horkheimer & Adorno, 2002, p. 173)

Critical Social Theory (CST) is an interdisciplinary framework that critically analyses society, culture, and social phenomena, with a focus on uncovering power dynamics, inequalities, and hidden mechanisms that perpetuate oppression. It aims to challenge dominant ideologies, promote social justice, and transform society through informed action and the critique of societal norms and structures. Critical theorists examine how power operates in society, not only in overt forms, but also in more subtle and hidden way. It explores how societal norms and values shape personal identity and how marginalised groups resist or challenge these norms, and how individuals' subjectivities and identities are constructed in broader social contexts (Braidotti, 2016).

Three theories inspired European ideas in the formation of CST. Kant's transcendental idealism, where the idea of morality in combination with 'Kultur' is

essential. It can propel the process towards the good, which shapes the human being. 'Kultur' is usually translated as civilization, an advanced stage of social development, which is in a contrast to violence and aggression (Freud & Riviere, 1930). Kant argues that human understanding is the source of the general laws of nature that structure all our experience; and that human reason creates the moral law, which is shaped by belief in God, freedom, and immortality. For example, "virtuous conducts will lead to our own improvement, and the Biblical phrase, 'Thou shalt love thy neighbour as thyself' means through your actions of kindness you will grow into *Menschenliebe* [love for your fellow Man]" (Dierksmeier, 2013, p. 604). The idea of 'Kultur', civilization, as a tool needed for a world without violence resonated in the writings of Freud and in the Frankfurt School, as well as in Agamben. This will be discussed further on.

Freud's psychoanalysis with the Freud's model of an iceberg describes three levels of the mind: id, the pleasure principle, that battles with the rule-following superego, and this tug of war is coordinated by the bargaining ego (Green, 2019). Our neuroses are the results of this negotiation. For Freud an individual is constantly under the pressure from society.

This idea was further developed by Fromm, who sees our behaviour as influenced not only by our subconscious but by economy as well. We work for our own interests and in order to satisfy our needs, we enter into relationships with other people, which shape us as well (Fromm, 1994). Freud's psychoanalysis influenced the consumer culture by exploring how can the understanding of group's mindset be used to manipulate people's behaviour, as can be seen in Bernays' propaganda campaigns (Bernays, 2004).

In the summer 1933, a few months before their books were burned in Germany, Freud and Einstein exchanged letters about "the war in which we refuse to believe" (Jovanovic, 2020, p. 202). After the Great war, later named World War I, another war seemed inevitable, and Einstein, the father of the theory of relativity, reached out to the father of psychoanalysis, asking for some wisdom on how to avoid this approaching catastrophe. "It would be of the greatest service to us all, were you to

present the problem of world peace in the light of your most recent discoveries, for such a presentation might blaze the trail for new and fruitful modes of action” (Belilos, 2016, p.2). As per Freud, the one solution to escape the war would be “strengthening emotional ties among human beings” (Jovanović, 2020, p. 207). However, war is the result of a fundamental human ‘death instinct’, the aggression seen as necessary to protect ourselves and our territory. “We are shaped by the long process of the development of civilization, to which we owe the best of what we have become, as well as a good part of what we suffer from” (Freud, 1930, p. 214).

One hope to stop this never-ending aggression that Freud and Einstein spoke of, was the proletarian revolution, as proposed by Marx. Although this also does not come without its problems. The utopian idea was that by bringing material equality to everybody the reason for wars, possession and protection of goods and lands, would be eliminated. As the father of the Communist Manifesto said, “The proletarians have nothing to lose but their chains” (Marx, 2008, p. 1). Or as Walter Benjamin argued, before his escape from Nazism, which ended in his suicide, with a hope for the oppressed, with a radical action such a revolution, the society can become better once and for all (Benjamin, 1968). Together these thinkers influenced the Frankfurt school, which was established in Germany in the 20th century. CST continued with Jurgen Habermas’ pragmatism and rationality and this influenced Foucault’s genealogy of knowledge (McCarthy, 1990) and Fairclough’s (2015) power and language.

3.1.1 The Frankfurt School

The Frankfurt school was established in the aftermath of World War I, with the intention of applying Marxist theory to understand the complexities of contemporary society. Its founders turned to psychoanalysis to explore the cause of wars, and to find the treatment for the problem of reoccurring conflicts in society. "To be able to come to terms with fascism, it was, therefore, considered necessary to complete social theory by psychology, and particularly by analytically oriented social psychology" (Adorno, 1967, p. 68). However, psychoanalysis was not the answer, as Freud wrote: “There is no use in trying to get rid of men’s aggressive inclinations... it is enough to try to divert them to such an extent that they need not find expression in

war whatever fosters the growth of civilization works at the same time against war” (Belilos, 2016, p. 21). It would seem that Kant’s ‘Kultur’ as the tool of the moral and ethical, was another hope against a war. And as such, ‘Kultur’ needs to be shut down to allow wars to progress, since economy needs wars (Végső, 2006).

Trying to make a sense of the dark reality of Second World War, Horkheimer and Adorno wrote the ‘Dialectic of enlightenment’ while in exile, in the year of the battle of Stalingrad, 1942. Their goal was to explore why humanity was sinking into ‘a new kind of barbarism’ (Zakai, 2018) by examining the basic text of ancient civilization, Homer’s *Odyssey*. Greek mythology is full of temptations, of a struggle between desires and morality. The gods are outside human control and require sacrifices as bribes, and gifts as a substitute for punishment. “The history of civilization is the history of introversion of sacrifice. In other words, it is the history of renunciation” (Adorno et al., 1992, p. 123). However, humans seems to give more than they receive in exchange. Choosing to work for a possible happiness in the future may, at the end, sacrifice happiness completely, since the desire and understanding of what happiness is may change during the life journey. By deferring the present happiness to the future, humans may never reach satisfaction. This self-sacrifice of happiness is constantly increasing the tension between ego and ‘egoless self’ (Bates, 2010).

As Marx argued, the false happiness of workers is required for the economic order in the totality of mass production and mass culture (Reijen & Bransen, 2002). Capitalism and fascism are intertwined as social principles, and there is a need for a different assessment of society. In 1985 Jurgen Habermas wrote “Horkheimer and Adorno conceptualize the Enlightenment’s process of self-destruction. In their analysis, it is no longer possible to place hope in the liberating force of Enlightenment” (Zakai, 2018, p. 243). Haberman developed two principles to counter this development, a communicative rationality, where everybody affected by norms needs to agree with them, and discourse ethics, where norms are valid only if all foreseeable consequences and side effects of all interested individuals are freely accepted (King, 2009). For Haberman a universal moral rule is not necessarily acceptable for everybody (Weng, 2014). Knowledge emancipated humans, but

“rational egoists would require a legal mechanism to compel compliance; however, in a state of nature, no such legal mechanism exists” (Ingram, 2010, p.18). As such free choice is again restricted. The social contract does not take into account the moral obligation to do good, without a higher principle, people obey the rules for fear of punishment, not necessarily because they agree with the law (Best, 1995).

Thus, in summary, the Frankfurt School played a crucial role in the development of CST, a social theory that aims to critique and transform society. It draws inspiration from the interdisciplinary approaches of these thinkers. Marx's work laid the foundation for understanding social conflict and historical change. The Frankfurt School, with Horkheimer and Adorno as key figures, expanded the scope of social theory by incorporating cultural and ideological dimensions.

Today Slavoj Žižek follows Marx in his criticism of the market economy, warns that we sell ourselves and our souls for profit. We trade our freedom for the unfreedom of material goods. Our choices exist only within the coordinates of the liberal capitalism around us (Žižek, 2002). As he explained in ‘Pandemic! Covid-19 shakes the world’, the virus gave us a chance to rebuild our society, since “we are all in the same boat now” (Žižek, 2020, p.5). This suggests that the pandemic is the utopian leveller against capitalism. While some would argue that the Covid-19 era has exposed weaknesses in the capitalist system and prompted a re-evaluation of societal priorities, others emphasise the adaptability of capitalism and the temporary nature of the crisis. Or, in the words of Klaus Schwab, the chairman of World Economic Forum, we need “to act together towards a common goal. We simply cannot progress without it.... Covid -19 gave us an opportunity to embed greater societal equality and sustainability into the recovery, accelerating rather than delaying progress towards the 2030 Sustainable Development Goals and unleashing a new era of prosperity” (Schwab, 2020, p. 221).

The narrative is the same as the one of Marx: by eliminating the ‘want’, by having everything, the suffering will be gone. Today, 150 years after Marx, who are again seeing the promotion of the hope for humankind in a revolution, in equal distribution of material possessions. The World Economic Forum is promising:

“You’ll own nothing. And you’ll be happy” in the study of ‘Eight predictions for the world in 2030’ (Wide Awake Media, 2023 [Tweet]). Since our consciousness is our vulnerability, the future belongs, as argued by Yuval Harari, to a single world culture where artificial intelligence will take over. “Within the next century or two, we humans are likely to upgrade ourselves into gods and change the most basic principles of the evolution of life ...we might end up with a world dominated by super intelligent, but completely nonconscious, entities” (Harari, 2021, para 2). Thus, the battle between id, ego, and super ego will be solved. Humans will become ‘homo deus’, immortal and all powerful (Harari, 2017). Hence, the critical social argument of yesterday is alive and well today. However, the revolution only replaced religion, ‘The opium of the people’ (Marx, 2008, para 4), with secularism of standardised consumerism, where pleasure and values became objects, and people became objects too. Art lost its magic and became a political tool for manipulation.

3.2 Critical Discourse Analysis

Michel Foucault is another influential thinker whose work is often situated in discussions about society, power, and human behaviour. While Foucault shares some common ground with Marx and the Frankfurt School in terms of his critical approach to societal structures, he also introduces unique concepts and methodologies. He explored further how power works to create and maintain social systems of control and discipline. Influenced by Nietzsche’s ‘On the uses and abuses of history for life’, Foucault investigated history with an archaeological lens (Rosenberg & Westfall, 2018). He took away our feeling of superiority by showing us that history was no less good than today’s world. Progress does not necessarily lead towards something better. “Because things are not always what they seem to be, and because awareness of this can create critical distance, because, in particular, such awareness can undermine the authority that derives from presumed rationality, universality, or necessity, it can be a social force for change” (McCarthy, 1990, p. 440).

Foucault sees power as inserted into reality by a system of social norms, being both productive and repressive. Power creates the future; it directs the transmission of knowledge and discourses and shapes our concepts and self-image. This notion of

power also accepts the capacity of people to resist and challenge regulatory measures, resist, and push back against government mandates. In ‘Madness and Civilization’ (1988), he argues that during the Renaissance society was more accepting of others, people were not labelled ‘crazy’ and locked up in mental institutions. He explored this idea further in ‘Discipline and punish: The birth of the prison’ (1977) suggesting that the use of punishment creates a feeling of superiority of doing good. However, Foucault also argued that by taking inmates from the public eye we, the society, are merely hiding the reality, not making it better.

In his work ‘The birth of clinic: An archaeology of medical perception’ (1978), Foucault provides a discussion on power, knowledge, and the ways in which institutions shape and control individuals, which can be applied to the analysis of various social phenomena, including health crises. Foucault's work, particularly his concept of biopolitics, is relevant in understanding how modern societies govern populations and manage issues related to health and well-being. Biopolitics refers to the intersection of politics and the regulation of life processes at the level of populations and is defined as “The way attempts were made to rationalise the problems raised for governmental practice by phenomena proper to a collection of living beings constituted as a population: health, hygiene, natality, longevity, races” (Lechte, 2008, p. 109).

During the Covid-19 pandemic, governments used science, data, and statistics to govern the population and they chose what information to present to the public, and also what to withhold. In other words, they controlled the knowledge and who had access to it. Foucault calls this governmentality, where the control of knowledge and how it is disseminated creates strategies that are used to exercise power over populations and dictate how subjects should behave. It is a balance between health security and freedom of circulation (Foucault, 2008). Governmentality, therefore, refers to the various ways in which societies are organised, regulated, and governed. It involves the techniques and strategies employed by governments to manage populations, institutions, and individual behaviour. Foucault's exploration of governmentality encompasses both the macro-level governmental structures and the micro-level techniques of power that shape the conduct of individuals within a

society. When applied to the context of pandemics, Foucault's governmentality becomes relevant in understanding how governments and institutions respond to health emergencies. Agamben sees this as an emergence of 'bare life', where biopolitics brings the domain of power and government out of a strictly judicial framework into the domain of everyday life (Agamben, 2005).

These ideas of Foucault influenced the next generation of critical social theorists, who took the concepts of Foucault's theory on power and knowledge and applied them to linguistic analysis. Such theorists, Ruth Wodak, Teun Van Dijk and Norman Fairclough, gave researchers a way forward in supporting the analysis of language and power through CDA, which supports the analysis of Foucauldian views on power and truth by examining the ways in which language and discourse shape and maintain power structures and knowledge systems. CDA looks for the discourse in our everyday reality, it explores social constructs by looking at reality with different lenses. Unconscious rules influence our behaviour, with culture deeply incorporated into our mind without thinking - Freud's iceberg. We shape our language to serve our needs and at the same time our language reacts to our surroundings. Language influences our understanding of reality. As Fairclough (2006) argues, social orders are framed and reframed through discourse (as action and text), perpetuated through those who hold the power and those who legitimise the actions as the truth (Foucault, 2001; Graso et al., 2022; Simons, 2021). CDA provides a framework for understanding how power operates through language and discourse, shaping our understanding of truth and influencing social practices. By analysing the discursive practices and power dynamics within a given context, researchers can uncover the ways in which power is exercised and resisted, and how truth claims are constructed and maintained. Power, in the form of controlling knowledge, therefore controls society and how much freedom members of that society can have. The motto of the Covid-19 pandemic was to 'trust the science' (Graso et al., 2022; Simons, 2021). The science is represented by those in power, rather than through the debate arising from scientific findings and collaboration.

CDA suggest such attitude towards science is problematic. Codes of language, perceptions and practices represent a system of thought that supports an "order of

things” that allows us to understand who controls society through the analysis of discourse that is shaped and reshaped by the everyday acceptance of those in power (Foucault, 2001, p. xxi). Trust and power relations are therefore intricately linked. Instead of seeing power as something centralised and imposed from the top down, Foucault argued that power is diffused throughout society. Institutions, norms, and discourses all contribute to shaping power dynamics. Desmet (2023) concluded that trust is generally built on transparency, communication, and mutual understanding, rather than on blind acceptance and obedience without question. Healthy relationships, whether personal or professional, thrive on open communication, shared values, and a willingness to question and understand each other's perspectives. While trust involves relying on someone, it is not typically associated with unquestioning obedience. In fact, healthy relationships often encourage individuals to express their thoughts, concerns, and questions. Questioning can lead to better understanding and growth. If trust is built solely on obedience without question, it may lead to a one-sided and potentially unhealthy dynamic (ibid). Within the framework of Foucault's ideas blind acceptance and obedience without question could be seen as aligning with certain forms of power. In some instances, power operates by establishing norms and structures that encourage conformity. However, Foucault also emphasised the importance of resistance. Even in situations where there is an expectation of obedience, individuals can engage in various forms of resistance, which may challenge established power structures, and this is how discursive formations emerge.

Discursive formations in CDA refer to the ways in which discourses construct, maintain, and legitimise social inequalities (Mullet, 2018). CDA recognises that language use is purposeful and that discursive choices can consciously or unconsciously perpetuate power asymmetries, exploitation, manipulation, and structural inequalities (Bhatia, 2020). CDA aims to critically analyse the discursive construction of social and cultural identity labels that legitimize discrimination against particular groups of people. In the context of CDA, discursive formations are not limited to linguistic dimensions but also include historical, political, sociological, and psychological dimensions. They encompass various strategies used to legitimise or delegitimise actions and create a sense of positive or negative acceptance. Discursive

struggles can arise in the form of truth fights, legalistic argumentation, and political wars over the legitimization or delegitimization of socio-political conflicts. Examples of this power struggle can be seen throughout history.

According to Foucault what is considered 'true' is often a product of historical and cultural context, subject to change over time. He argued against the notion of a fixed, unchanging truth and examined how establishments and structures of power shape the production and dissemination of truth. He showed how different institutions, such as prisons, hospitals, and schools, exercise power by determining what counts as true, acceptable, and legitimate knowledge within their domains. Or, as Nietzsche argues, no point of view can comprehend an absolute truth (Nietzsche & Hollingdale, 1982). Seeing the truth from only one perspective gives us only an incomplete picture (Nietzsche, 1968). Every society has its own truth, redefined, and reinforced by education, politics, media. People with status can enforce what they think counts as true truth (Foucault, in Rabinow 1984). Thus, in the pandemic, truth was what the government said it was.

Amongst such an absolute control a dissent rises. Both Krzyżanowski (2020) and Wodak (2015) contend that dissent occurs at the boundaries of change from one epoch to the next and is essential to a transformation into something that will become normal in society. This, in turn, eventually leads to sustained moral panics (Krzyżanowski, 2020), resulting in the exclusion of various members of society from both social imaginaries and specific practices (Krzyżanowski & Krzyżanowski, 2022). In fact, practically every crisis since 2000 has resulted in a similar process, building specific forms of stigma (Krzyżanowski et al., 2023) around social groups who allegedly were responsible for social problems, while simultaneously calling for the introduction of a normality that both symbolically and structurally excludes those others (Wodak, 2015). Racialized practices, where "society will direct against itself...the internal racism of permanent purification" became "one of the basic dimensions of social normalization" (Foucault, 2008, p.113).

Foucault proposed the idea of "episteme," which refers to the dominant system of knowledge in a particular historical period. He argued that different epistemes

shape the way truth is understood and are produced in different eras. These shifts in epistemes result in changes in what is considered true and valid knowledge (Foucault, 2001). Foucault argues that each historical epoch is characterized by a distinct episteme that shapes how knowledge is categorised, understood, and expressed. The episteme determines the rules of discourse, the formation of concepts, and the relationships between different fields of knowledge. These concepts define the boundaries of legitimate knowledge during a specific historical period. Epistemes also define the relationships between different fields of knowledge, determining how they interact and influence one another. Foucault talks about ‘epistemological breaks’ that represent radical shifts in the ways knowledge is structured, produced, and understood. They mark moments of discontinuity and transformation in the history of thought. The pandemic was one such rupture in the order of things, making way for new truth claims.

3.2.1 Genealogy and archaeology

“Foucault’s archaeology is grounded in addition; for him the fundamental archaeological task is accumulation. For Agamben, on the other hand, the archaeologist requires an “algorithm,” a means of arranging historical statements into a formula that produces something more than the sum of its parts” (Tell, 2012, p. 12).

Foucault introduced the concept of archaeology as a method to examine the historical ideas, practices, and institutions (1977). It involves uncovering the underlying systems of thought and the rules that govern the formation of knowledge within a given historical context (Allen et al., 2003; Gutting, 2019). Genealogy complements archaeology and refers to the analysis of discourses and practices within specific historical periods to understand how knowledge and truth claims are produced and maintained. In this context, genealogy seeks to reveal the complex interplay of power relations that have influenced the formation of knowledge and truth claims. It involves tracing the ways in which knowledge, power, and discourse have shaped societal norms and structures over time.

Van Dijk refers to 'the necessity to change' in the world, without specifying the nature of the desired change; as if change were only good or could only be in one direction (van Dijk, 1993). However, in today's world, it is not just the conscious objectors that disrupt societal norms, it is now also social media. Internet creates an instant world of dissent, change, or guidance. Message control has become a double-edged sword in today's politics. It can either be used for 'the greater good', or for the creation of discursive formations that disrupt what has always been considered normal (Wodak, 2022). When considering the journey of the Covid-19 pandemic it is clear that information/disinformation across the media created disruption for government messaging attempting to control what the public heard about Covid-19. Therefore, in understanding how the discourse of the pandemic impacted on nurses and the capacity to work, the processes of text production, distribution, and consumption, and discursive events as instances of sociocultural practices and disruptions, must also be examined.

In the 'Digimodern' world the information on social media is immediate, it is available while the situation is happening, simultaneously history, present day and influencing the future. It is necessary to ask questions on who said what and why, when did the narrative change, and who changed it. It is possible to follow the development of the narrative and to examine its influence on the understanding of reality. "Language and discourse are not simply epiphenomena that communicate an objective reality; they continuously build and rebuild institutions, construct identities, and motivate legitimate actional" (Sam, 2019, p. 3). As Kirby (2009) noted, social media is full of emotions, fear, and anxiety. Blocking, deleting, unfriending, ghosting, is a nonstop reality. Moreover, in the 'Digimodern' era, authors on social media can hide their identity, meaning the discursive formations are no longer individual opinions made public as a conscientious objector, they can be hidden in electronic script with no author. Twitter reported in 2018 that 9.9 million accounts on its platform were bots, artificially created 'truth claims' used to "privilege one type of knowledge over another... give legitimacy to some ideas and not others" (Sam, 2019, p. 336). The key to mapping these truth claims across time, along with other pandemic information, such as what is revealed through mainstream media, policy,

and government directives, allows a researcher to reveal the role of discursive practices in the maintenance and transformation of social worlds (Lunkka et al., 2022).

Genealogy rejects the Marxist paradigm that only material, economic power determines our consciousness. The approach shifts from pure interpretation of history to understanding that there is not only one revolution, but a continuous attempt to deconstruct and break away from predominant regimes that form our subjectivity (Bielskis, 2005). Genealogy describes the events that took place in history and relates them to governmentality by exploring how the sovereign powers rule human populations via various policies (Foucault, 2008). It labels people, by putting aside those deemed as a threat to society, it marginalizes the opposition. The more the power knows about the population the better they can serve the people or control them.

Foucault (2001) argued that power is everywhere; its capillary effect shapes the way people behave, interact with others, and interpret information. As per Anais (2013), genealogy tells a story of how “A set of discursive and non-discursive practices come into being and interact to a set of political, economic, moral, cultural and social institutions that define the limits of speaking, knowing and acting” (p. 125). How nurses interpret, act, and embed the discourses of the pandemic into their daily lives is influenced by what is being said by those driving the agenda, the global responses to the pandemic, resulting in policies, mandated by governments, and enforced by health authorities. The historical investigation examines how knowledge and power is created within the social orders (such as health care), it examines the power differentials and the creation of truth by investigating how orders of discourse are interpreted, enacted, and redefined across time (Fairclough, 2003; Foucault, 1978).

3.2.2 Fairclough’s discourse analysis

Fairclough is one of the pioneers of CDA, combining linguistic analysis with social and political critique. He aims to uncover how language is used to reflect and reinforce power relationships, social hierarchies, and ideologies. Fairclough's work

emphasises the role of language in reproducing and contesting power dynamics. He speaks of a dominant as well as a hidden discourse (2015). Although power is everywhere according to Foucault, Fairclough helps to identify how power is controlled by those in dominant positions and how their ‘truth’ becomes embedded into society. As Fairclough (2006) noted, “Human beings engage in social activity in a preconstructed social world, which is largely beyond their control. They must come to terms with it, accept that they can only act within certain parameters and constrains...” (p. 163)

Fairclough in ‘Language and Globalization’ (2006) discussed the ‘war on terror’ and how conditioned people became in accepting directives regardless of any logic or rationale, and how people who challenged the directives were termed ‘unpatriotic’. It is this acceptance of directives from the government that allows changes to the social narrative in time of crisis, such as a pandemic. These challenges to the dominant discourse created instability in society, therefore creates the dissent that Wodak (2015) refers to, and the moral panics that Krzyżanowski (2020) refers to, that set the scene for a change in epochs as discussed earlier in this chapter. By examining the orders of discourse across levels of society, researchers can uncover the power relations and knowledge systems that shape and regulate social practices and truth claims. These social orders refer to what is happening across micro (individual), meso (society) and macro (government) levels of societal order (Fairclough, 2001).

3.2.3 Reason for choosing CDA

“We should consider the events we have witnessed within a broader historical perspective. If the powers that rule the world have decided to use this pandemic, and it’s irrelevant whether it is real or simulated, as a pretext for transforming top to bottom the paradigms of their governance, this means that those models were in progressive, unavoidable decline, and therefore in those power’ eyes no longer fit for purpose.” (Agamben, 2021, p.4)

An examination of nurses in the pandemic cannot be done in isolation of health and healthcare. I invoke Foucault’s biopower, which aligns with his notion of

governmentality as mentioned earlier in the chapter. Biopower or biopolitics is the terms that Foucault (1977) gave to mechanisms and tactics of power over life as a population group and bodies, rather than the individual. Biopower operates through various disciplinary techniques, such as medical practices, educational systems, and scientific knowledge. It relies on technologies of surveillance, statistics, and data collection to monitor and control populations. As Foucault argues this biopower shifts power relations from the control people have over their lives, to that which is controlled by a single powerful entity, that mobilises the entire population for the purpose of defending life against those who deviate from norms and as such threaten the biological heritage (Foucault, 1977). The discourse of power relations in the pandemic is therefore an essential part of this thesis, to understand where politics and power have situated nurses and their work. CDA therefore is an essential element of this study.

I wanted to deconstruct, examine, and reconstruct what happened during the pandemic times to understand the situation of nurses working in the middle of this emergency. The narrative of the pandemic was explored. At the beginning of the pandemic nurses were heroes, they were praised for their work. Three years into the pandemic, nurses are not essential workers anymore, they could be disposed of for questioning the social and political order. Foucault's power imbalance comes into force, the dominant discourse owned by those in power.

3.3 Stories

The CDA has a constructionist's standpoint and a critical approach that illuminates underlying power struggles and values in social domains. By analyzing the text of a specific area, it is possible to uncover relationships of dominance, power, and control that are manifested in the language (Fairclough, 2015). Text could be written as well as spoken. Central to CDA, and what distinguishes it from other discourse analyses, is that language is seen as being simultaneously shaped socially as well as shaping the social landscape. According to Fairclough (2015), the "linguistic phenomena are social phenomena of a special sort, and social phenomena are (in part)

linguistic phenomena” (p. 56). A CDA approach also links discourses to social practices, e.g., healthcare.

Fairclough's approach recognises the importance of subjectivity in understanding language. Fairclough's discourse analysis, in turn, can benefit from an understanding of the subjective dimensions embedded in the stories. Fairclough's discourse analysis also recognizes the importance of historical context in understanding discourse. His approach can provide a more nuanced understanding of the temporal aspects of language use. Fairclough's interest is in understanding how different social groups use language. He sought to explore how different voices contribute to the construction of meaning in a given context.

To capture the nurses' stories, it was important to understand the way they described the power relationships associated with their work. CDA provides researchers with direct access to participants' perspectives, experiences, and narratives, which are essential for understanding underlying ideologies, power dynamics, and meaning-making processes. It recognises the importance of context in shaping participants' responses, as attention is paid to the social, cultural, and situational factors that influence the language and narratives discussed by participants (Fairclough, 2015). Fairclough (2015) introduced a three-dimensional framework for analysing discourse: text, discursive practice, and social practice. This framework emphasises the interconnectedness of language use, social context, and broader societal structures (as discussed earlier in the chapter).

By collecting stories from nurses, the reality for the nursing workforce during the pandemic can be examined. My understanding of the context of nursing during the pandemic in Israel helped me to review nurses' stories. Field notes became my comparison and my contextual framework to the experiences being told by nurses, allowing for reflexivity and the understanding of the nuances within their stories. Additionally, because of my own experiences, participants felt safe with me and shared their stories willingly.

By retelling nurses' stories from the pandemic, their realities were examined to identify the issues that they faced on a daily basis, how they managed them, and

what support they received. From the stories, an analysis was formed to assist answering the research questions. By employing Fairclough's analysis of discourse and power, a deeper understanding of the complex interplay between language, power and the social context was valuable in identifying patterns of discourse.

Stories are told using experiences from the past so that the temporal aspect of a story embraces social change that occurs over time. These past experiences help a person to make sense of what is happening to them today. With the nurses in a pandemic, the way they coped with, and adapted to the unpredictable Covid-19 working environment, was influenced by their own professional and experiential background. These elements were important to explore in relation to stress, coping and burnout in individuals.

People construct and reconstruct their identity through social connections and describe themselves through those connections and through their family influences and upbringing. An individual's story will also be influenced by which social identity they focus on. For this study, it was important to explore both the professional and the personal identity, given that the pandemic impacted on a nurse's family through their concern about taking the virus home. It was therefore important to explore how nurses balanced their home and work life during this pandemic.

Spatiality relates to the place and the environment, which also effects how an event is experienced individually (Haydon et al., 2015). For example, in Israel, there is a constant underlying conflict that influences the way nurses are educated and prepared for crisis management. This is not the case in New Zealand. The context of nurses' work will be important in understanding what influences and experiences shaped their coping during the pandemic.

In the interviews the interconnections of these three dimensions are important to capture as an individual shares their story. 'Where' (spatiality) the individual is located, 'who' and 'when' (temporality) and why' (sociality) become essential elements to situate the dimension of the story (Table 3-1). The relationships between these are equally important in the analysis of the narrative. The methods used for the story telling are explained in Chapter Four.

Table 3-1: Dimensions of the story

Spatiality	where	Israel and New Zealand
Temporality	when	Covid-19 pandemic (2020-2022)
	who	Nurses
Sociality	why	Giving voice to the silent

3.4 “Come back, Michel Foucault – we need you!”

In 2020 philosopher Bernard-Henri Levy in his book ‘The virus in the age of madness’ expressed the above-mentioned sentiment (p. 1). The medical-gaze changed into power-knowledge reality. Health became an obsession (ibid), and medicine turned into a religion (Agamben, 2021). For Foucault, power is the necessary tool for a progression towards the better. The power is not Marx’s revolutionary struggle. As Foucault argued, “We must cease once and for all to describe the effects of power in negative terms: it ‘excludes’, it ‘represses’, it ‘censors’, it ‘abstracts’, it ‘masks’, it ‘conceals’. In fact, power produces; it produces reality; it produces domains of objects and rituals of truth. The individual and the knowledge that may be gained of him (sic) belong to this production” (Foucault & Rabinow, 1991, p. 194). At the present, science evolved from representing a truthful observation through which a minority can challenge the established dogma, into becoming the dominant, dogmatic discourse itself (Desmet, 2023). The unity of scientific knowledge is utilized by means of censorship. Agnotology, defined as a culturally encouraged ignorance, become a tool of politics (Lee, 2020). Galileo Galilei’s whisper “And yet it moves” is back. Scientists can only whisper what they believe is the truth to avoid the label of ‘heretic’ with all the consequences, such as being blocked, ghosted or ostracised from further academic discussions. Science become a rigid ideology, beliefs are not to be questioned, as Dr. Fauci said on June 8, 2021: “Attacks on me, quite frankly, are attacks on science” (Soave, 2021, para 1). Foucault warned about this biopolitical reductionism and panopticon in ‘Birth of the clinic’ (1973) and ‘Birth of the prison’ (1975). Governmentality, the exercise of power over population, needs to take

“charge of the bodies [because] ... biological trait of population become relevant factors for economic management” (Horton, 2020, p. 1).

While CDA primarily focuses on analysing through description, interpretation, and explanation, it can benefit from a multi-method approach to gain a more comprehensive understanding of the phenomena being studied. Incorporating multiple methods can provide richer insights and triangulation, which helps to enhance the validity and reliability of findings. Knowledge is used to control and manipulate, putting Foucault’s biopolitics into practice. Behind everything written and spoken, there is a silent discourse. By taking the top-down approach practiced by Foucault, examining the political, ideological and historical realities of the Covid-19 pandemic, we can “understand who has power, authority, and legitimacy in this discourse and how is it exercised.” (Sam, 2019, p. 340).

Archaeology aims to uncover the reality of society in time. Genealogy goes one step further, it looks not only at what happened and how, but more importantly tries to answer the question: *cui bono* (‘for whose interest’). To dig into the origins, the acquired understanding of history needs to be put aside since an examination of ‘what was’ from a new point of view is needed. Using Foucault’s genealogy for comprehension of the Covid-19 times seems a bit farfetched, since why should archaeological tools be necessary for something which started presumably only three years ago, and is very much still present? However, people adjust rapidly, especially in abnormal times, and with survival instincts quickly start seeing the new reality as ‘the new normal’.

Looking outside the official narrative was necessary for the analysis of the Covid-19 pandemic discourse. This involved examining how power relations, societal normative as well as the construction of truth manifested in the ways people spoke about, understood, and experienced the pandemic. I had to first construct the picture of the pandemic by drawing on different sources such as government statements, media reports, and scientific discussions, and how these contributed to the construction of ‘truth’ about the pandemic. I then examined the power dynamics in the health messaging about the pandemic, and how guidelines, recommendations, and

information was disseminated. Further, I then examined how these messages were interpreted not only by the public, but by the nurses, and how these shaped their experiences and self-discipline. Moreover, knowing that the media had a large part to play in communicating pandemic tensions, it was important to find out how the media portrayed the pandemic and how certain narratives became dominant.

3.5 The conceptual framework

The conceptual framework (Figure 3-2) was used to map the approach of this study. The process describes the relationships between the elements, which can be based on logic, theory, or experience, allowing for a pragmatic and transparent process of data collection and analysis (Sibbald et al., 2021). Using a case study of New Zealand and Israel allowed for a suite of methods, based upon the research question. Each data source becomes “a piece in the puzzle” which was analysed individually and then collectively across the range of methods to arrive at a full and comprehensive understanding of the subject (Baxter & Jack, 2008, p. 554).

What are the experiences of nurses working during the Covid-19	
Research Objectives	Map the development of pandemic narrative
	Identify nurses' experiences
	Provide recommendation
Methodology	Critical Discourse Analysis
	Genealog/Archeology
Methods	Case Study
	Text Analysis
	Interviews
	Field Notes

Figure 3-2: Outline of research approach

3.6 Situating myself in this study

This thesis departs from the conventional approach because I was so invested in the day-to-day life of the Covid-19 pandemic as a nurse in Israel. Emotionally,

physically and clinically, I was challenged by the virus itself and the veracity of it, but also the management of the virus, the arguments and the counter arguments that plagued the world and more intimately, nurses trying their best to care for patients in the face of messages and directives that change, sometimes, daily. Reflecting on my own positioning in this study, I realised that I could not remove myself from what has been a personal experience as a nurse facing the virus at my work, and as a researcher hearing the stories of others like me and unpacking the web of discursive texts surrounding the pandemic in health care. While my substantive underpinning for the study is supported by the works of Foucault and Fairclough, I realise that I have to declare a somewhat autobiographical stance on this thesis.

The integration of autobiographical narratives within a thesis can be a compelling approach, particularly when framed within a CDA. Autobiographies serve as rich, subjective accounts that can illuminate the complexities of personal experiences and societal structures. Fairclough (2013) argues that the approach to discourse and social change should be multidimensional, using methods that support the uncovering of those hidden discourses that occur in discursive social change. As Foucault noted, genealogy and looking back at history is important to understand the social change occurring today. This historical discourse, according to Wodak (2015), is important to understand the contextual political and discriminatory influence. Using a dual approach of autobiography and CDA allows researchers to explore both individual narratives and the broader discursive contexts that shape them. Supporting this view, Stone (1981, p. 80) describes autobiography as being "...simultaneously historical record and literary artefact, psychological case history and spiritual confession, didactic essay and ideological testament". Tenni et al. (2003), note that biographical data is never free (p.5), however, when an autobiographical approach is used within a solid theoretical underpinning, it is possible to ensure a rigorous process for analysis. Thus, the use of autobiographies can serve as vital tools for understanding personal and social dynamics, particularly in contexts where identity and experience intersect with broader societal narratives (Hulsink & Rauch, 2021). Using an autobiographical approach with CDA allowed me to critically examine the language and power structures embedded within these narratives. This critical lens is

essential for dissecting the ways in which personal stories are influenced by, and in turn influence, societal discourses. The intersection of autobiography and CDA helped me to reveal how individual experiences are shaped by larger cultural narratives, situating these experiences within a broader analytical framework that considers the implications of language and power dynamics.

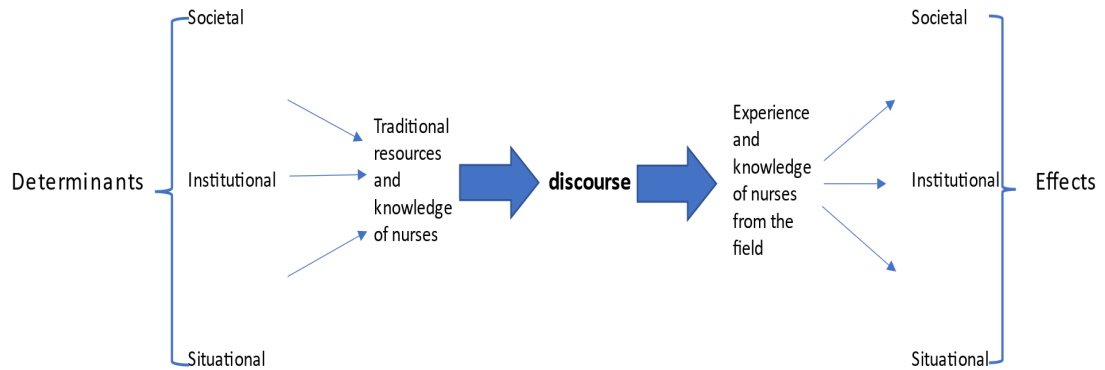
The next chapter discusses the specific tools used for the mix and match methodology approach. Peer reviewed articles, grey literature, mass, and social media analysis serve as a tool to describe the development of the narrative during the pandemic, as well as finding the underground story from the silenced others. Nurses provide the necessary micro lens, which will give us an intimate look into what was happening on the ground.

Chapter Four: Methods

This chapter outlines the research epistemology and the rationale for the methods used to accommodate the multi-method approach to this research. The theoretical framework used for this research is based on Discourse Analysis particularly Foucault's theory on power, biopolitics and surveillance, and Fairclough's critical discourse analysis. O'Leary (2021) emphasises the importance of selection of the right research paradigm for assistance with finding the answers to research questions. As such, I selected a qualitative case study approach as the best method for collecting of the relevant data because it allowed me to explore the pandemic discourse through a variety of lenses.

4.1 Process of data collection and analysis

As indicated in the previous chapter, Foucault's work on power relations and discursive formations is important in order to understand how the nurses were situated within the organisations during the pandemic. Within that, I also wanted to know what support nurses were being given, considering the fact the directives were ultra-dynamic, sometimes changing more than once per day. Discourse, in these cases was discourses across peers as well as up and down the hierarchy of health social order. Fairclough's social orders and social orders of discourse allows for the analysis of discourse (as action and text) to be examined across three levels of social order – micro (nurses and nursing work); meso (organisational directives and policy); and macro (national and international directives related to the management of the pandemic). To frame the study, I used a case study approach to examine the pandemic discourses in New Zealand and Israel. To frame the data for this research, I used Fairclough's social orders and social orders of discourse (2001). To collect the data; I used qualitative methods advised by discourse analysis theory, including the more recent inclusion of corpus discourse through media (Boulton, 2022; Fairclough, 2001; Flowerdew et al., 2018; Wodak & Meyer, 2001).



Adapted from Fairclough: Language and power, p. 175

Figure 4-1: Fairclough's contextual analysis

To analyse the narrative corpus, I used Fairclough's contextual analysis (Figure 4-1). The process by which data was collected and analysed is demonstrated in Table 4-1. Each of the methods is then discussed thereafter.

Table 4-1: Data collection and analysis

Preparation	Puzzle	What are the experiences of nurses working during the Covid-19 pandemic, and how were they supported? A case study of two countries, Israel and New Zealand
	Unit of analysis	Findings from archaeology/genealogy, academic and grey literature, secondary sources, interviews, and field notes
	Making sense of the data	<ul style="list-style-type: none"> • Collation of findings, re-reading, looking for patterns in the data
		<ul style="list-style-type: none"> • Referring back for clarification of patterns
<ul style="list-style-type: none"> • Bringing together all similar patterns 		
Organisation	Abstraction and creation of a matrix	<ul style="list-style-type: none"> • Creating subcategories of similar topics
		<ul style="list-style-type: none"> • Grouping subcategories into larger categories
		<ul style="list-style-type: none"> • Bringing categories into a main category
Reporting	Findings	Collating the evidence to create a concise outline of findings and recommendations

4.2 The case study

For this study, I chose two countries to review, New Zealand and Israel. I focused on the levels of information and data collection in the two countries that

together would assist in examining the discourse around nurses and their support systems at the micro, meso and macro levels of the social order that influenced nursing work during the Covid-19 pandemic (Fairclough, 2015). Israel and New Zealand were chosen because they represent two very different pandemic trajectories, both are relatively contained in their border restrictions, and had put strict controls in place during Covid-19. Both countries were accessible to me.

The case study method is used to explore complex, real-world phenomena within their natural context. It involves an in-depth examination of a single case, or a small number of cases over time, to gain a comprehensive understanding of the underlying issues, dynamics, and intricacies of the subject under investigation. Case studies are particularly useful when the research questions are exploratory, descriptive, or when the phenomenon is difficult to study through conventional experimental or quantitative methods (Crowe et al., 2011; Priya, 2021). This is true of the pandemic, where both countries followed similar directions but had different outcomes. Both countries are small and relatively contained and data was relatively easy to access.

Case studies are located within a constructivist paradigm. They allow a researcher to focus on questions that ask the ‘how’ and ‘why’ about a particular problem when the behaviour or context of a study cannot be manipulated, or when the boundaries around the topic are either unclear or dynamic in nature (Yin, 2014; Zulman et al., 2014). This methodology recognises that situations under scrutiny will inevitably be influenced by humans and therefore meanings and reality are socially constructed. It allows for collaboration between the researcher and participant, the participant can tell their stories in their own way and within a specific context that directly involves them as a player within the field. It allows for a clear understanding of how a participant views their world, what impacts on their world and how they interact with it. This is important when trying to understand the experiences of nurses working in the pandemic and exploring the influences that affected how these individuals perceived it.

For this study a descriptive case study was used. This type of case study is used to discuss the real-life context of the phenomenon under scrutiny (Baxter et al, 2008). This approach permitted the exploration of the experiences of nurses who were working during Covid-19 and to investigate what support they received during the pandemic. Importantly, I explored the policies put in place to manage the emotional, physical, and mental health of health workers, the impact of mandatory orders related to work, and vaccination requirements on the nursing workforce morale and retention.

4.3 The archaeology and genealogy of the pandemic

Foucault argued that we have to look at the history in order to understand the present. He describes historical time periods as epochs which he referred to as epistemes (historical periods). An episteme has a set of rules that defines what is considered true, acceptable, and possible during a particular period. It shapes scientific and philosophical thought through social, cultural, and institutional practices. History is also not continuous nor is it linear. Each epoch has its unique way of understanding knowledge, power, and truth. These discontinuities or shifts in power and knowledge are intertwined, influencing how institutions and society accept the claims as the truth, thereby normalising them as a way of life. The archaeology of knowledge that Foucault describes allows a researcher to examine the historical rules of knowledge, whilst the genealogy helps to trace the development of practices and discourses around that knowledge over a specific time period or periods (Foucault, 1972; Lawlor & Nale, 2014).

In February 2023 Prof Jay Bhattacharya tweeted: “Agamben was a hero of the left, prophetically warning against a state of exception in which politicians exploit emergencies to violate basic civil liberties. Why did the left abandon him in the pandemic?” (Bhattacharya, 2023 [Tweet]). To answer this question, to understand the time in which we live, we need to access the present through investigation of the past, we need to use the archaeology approach. This method also means investigating not only one narrow subject, in the case of this thesis the experiences of nurses, but to look broadly into the world reality we lived in during the pandemic times, from 2020

to 2023. Only by exploring the whole picture in its context we can try to understand the present (Agamben, 2017).

And we can also try to answer the research question: **“What were the experiences of nurses working during the Covid-19 pandemic?”**

To comprehend the full impact on nurses working during the time of ‘mass quarantine of healthy individuals’ (Shullenberge, 2022) I utilized not only health care databases but reviewed secondary sources of data, such as grey literature, pre-print servers, e-news, and social media. As defined by the Cochrane handbook, grey literature is not peer reviewed and can be affected by publication bias (Higgins et al., 2022). Adams et al. (2016) argues publishers prefer publishing studies with expected results, in sync with established dogma. Kousha et al. (2022) investigated the scholarly value of grey literature and concluded there is an increasing use of grey literature citations in academic research, which seems to have been accelerated by Covid-19, and “Citing grey literature has become an accepted and standard part of research” (p. 3500). Established review methods should be adjusted to search for and analyse data from secondary sources, as explained by (Adams et al., 2016). I utilized a snowballing method recommended by Greenhalgh and Peacock (2005). As suggested by Billings et al. (2021) results were synthesised to illustrate the development of the pandemic narrative.

After 9/11, Fairclough (2008) warned against the rein of war on terror, which allowed for unprecedented policies on personal freedoms via normalization of a new power language. During Covid-19 times, “Many of those who criticized the rhetorical slippage of 2001 engaged in it themselves in 2020” (Shullenberger 2023, para 4). The pandemic measures pushed the boundaries of power language further. Agamben argued in early 2020, “it may be possible that people will start wondering whether their way of life was right in the first place” (Agamben, 2020, p.32). To see in 2023 if he was right, we need to examine what was happening in 2020 and how the pandemic narrative developed over three years.

4.4 Media analysis – corpus analysis

Corpus linguistics is relatively new but is becoming an essential part of any discourse analysis, because of the explosion of social media and other forms of electronic news and views. Media discourse analysis examines how different groups, events, and issues are represented in media, media being electronic and written text, pictures, videos and social and online platforms. Analysing the media as a corpus, allows researchers to explore underlying ideology of groups, events and issues, that are reflected, promoted or represented across society (Flowerdew, 2018; Kryzyzanowski & Tucker, 2018).

Media discourse is rarely isolated, rather it draws on texts, historical references and cultural norms and values. In terms of the pandemic, the discursive discourses have been highly publicised through very different lenses that explored economic and social impact, as well as using war metaphors such as the global fight against the virus. As Flowerdew (2018) argues, relying only on the text from media requires focus and an existing question in order to create the corpus that identifies the positioning of the subject and how it is framed. However, electronic texts are a good support for other forms of discourse analysis when combining methods for triangulation and debate. The collection of information here can either be corpus-based which serves as a testing ground for claims and theories, or it can be corpus-driven which attempts to minimise assumptions about text and language “to describe the corpus as comprehensively as possible without privileging preconceived ideas” (Flowerdew, 2018, p. 109). For the latter to be successful, keyword analysis helps to identify quantitative trends in the corpus, using a normed frequency approach to identify the main key words, and within this, the themes that are emerging.

Using social media as a data source is a relatively new phenomenon (Adams et al., 2014; Jesser et al., 2022; Zhang & Zhu, 2022; Zhang & Ahmed, 2019).

‘Infodemiology’ is, “The science of distribution and determinants of information in an electronic medium, specifically the Internet, or in a population, with the ultimate aim to inform public health and public policy... analysing how people search and navigate the Internet for health-related information, as well as how they communicate and

share this information, can provide valuable insights into health-related behaviour of populations" (Eysenbach et al., 2002, p. 12). The World Health Organization (WHO) recognized the importance of the 'Infodemiology' as a key method in fighting 'Infodemic' (Calleja et al., 2021; Eysenbach, 2020; Tangcharoensathien et al., 2020). Covid-19 is referred to as a "digital pandemic," due to the explosion of coverage and speed of information shared on social media (Banerjee and Meena, 2021, p.3). At the same time, use of various platforms can be helpful to fight an outbreak, especially when time is of the essence (Merchant & Lurie, 2020). The Internet, being presently the most powerful source of information, takes power away from governments. This implies a power struggle, in which stakeholders are forced to resist this shift, for example by constituting "global ethical codes under which health information can be published" (Cuan-Baltazar et al., 2020, p. 27). This proposed control of information is covered in depth in Chapter Eight.

For this study, the focus was on the pandemic policies, processes and activities and how nurses are positioned within it. The approach was to first seek out articles related to the pandemic between the years of 2020 and 2023, to map the changes and discursive discourses into themes, and then to look for references to nursing and nurses within them. Each set of media was a corpus of itself, explored individually for national and international discourse surround the pandemic, and then brought together as one large corpus within which the role and positioning of nurses and across all the levels (macro-, meso- and micro-). All documents accessed for this section were freely available on the Internet. The corpus used for this study include:

1. Newspaper articles
2. Social media
3. Documents and directives related to the management of the pandemic

4.4.1 Newspaper articles and documents related to the pandemic

Newspaper articles are a significant component of the social environment, and a key for people to gain information about current events (Miller et al., 2017; Rozanova et al., 2006). Guided by media analysis studies that select a sample of total articles to conduct in-depth thematic analysis (Ecker et al., 2014; Spinde et al., 2021) I

used sampling media analysis to explore the manifested and hidden themes in news reports as discussed by Francis et al. (2010). This approach recognises that what appears in news articles is always a result of direct and/or indirect framing, a “Particular perspective one uses to bracket or mark off something as one thing rather than another” (Schneider & Altheide, 2013, p. 53). I sorted the retrieved articles according to themes. This analysis provides a flexible approach that recognises the researcher’s interpretation as situated and contextual. (Braun et al., 2017)

To get a clear picture of the situation on the ground I searched for articles from online newspapers on the web, using Google engine at the University library, to avoid a possible search bias from using my own computer (Gezici et al., 2021). The keywords used were simple, as recommended by Hoffecker (2020), specifically:

“nurse + Covid-19/coronavirus + New Zealand/Israel”

Data ranged from February 2020 to December 2022 (inclusive). The language limit was set to English, since the language of my research is English, and information in Israel is published not only in the official language, Hebrew, but in English as well. I searched articles until saturation was reached. Some approaches, like schema analysis or grounded theory work best when exploring data and building hypotheses, while others, such as classical content analysis, are more appropriate for testing theories and models. However, inductive thematic analysis is the most suitable for discovering categories, patterns and themes in the data and formulating hypotheses about the correlations between them. Generally, a sample of 30-50 texts is recommended for optimal results. (Roanova et al., 2006). My analysis was both descriptive and inductive.

I used the NVIVO mapping tool to support the collaborative analysis process. I separated the results by years, 2020 being the beginning of the pandemic, 2021 was the year of the vaccination, 2022 the time of trying to return back to normal. The main themes are discussed in detail and similarities and differences as well as developments in newspaper topics summed up for both countries individually and then collectively. Examination of the mass media showed common themes in both Israel and New Zealand. These themes were analysed and compared with the themes from peer

reviewed literature and with findings from interviews. The evidence was summarized and is presented in findings and summary chapters.

4.4.2 Social media

During Covid-19 information was shared through social media. It was the fastest means of communication. Lockdown made people isolated physically but gave them more time to engage virtually. The discussions on Facebook, Twitter and Telegram became passionate, and emotional. Many pre-prints of academic research made it onto Twitter before the peer-preview process was put in place and official journals either published or rejected those findings. For example, Michael Levitt regularly shared his understanding of the Covid-19 data on Twitter, asking for input from around the world, igniting worldwide discussions between scientists, health care professionals, and the general public about Covid-19 statistics and policies.

In this study I drew from social media posts as collected in my Field Notes. Being a nurse, from the beginning of the pandemic I tried to find information about the virus, how to protect myself and my patients, what treatments are available, and to share my experience with other professionals. In agreement with Cáceres (2022), in my research “Alternative perspectives are described and referenced in more details since mainstream perspectives are well known” (p.638). I received permission to use Twitter API academic research, which allowed access to global data of up to 10 million Tweets a month. Their transfer into a software program can generate an artificial evaluation. However, since my research objective was not to analyse Twitter data, I did not utilize API research.

I followed Twitter for the three years of the pandemic to record the mood and to search for information relevant for a nurse. I wanted to know what information was accessible for a health care professional, who is treating patients, and experiencing the pandemic firsthand. One of the aims was to uncover the discourses that help to maintain power structures and perpetuate existing social relations. Internet and social media define much of the way we communicate today, and this brings challenges as well as new opportunities. As argued by Bouvier & Machin (2018), “New methods are required for data collection, as content takes new forms and also moves away

from running texts to language that is much more integrated with forms of design, images, and data" (Bouvier & Machin, 2018, p. 9).

As Hou et al. (2021) mentions, social media are not always a representative sample of the population, there are many sources of noise and sampling bias. For example, on Figure 4-2, Prof David Shachar, an epidemiologist, and public health specialist in Israel, does not write the word “vaccine”. This word would automatically flag his post, meaning the post can be censored, pushed down on newsfeed metrics, making it invisible for most users, even cancel the writer himself, as explained by Bhattacharya (2022c). The use of variety of ‘newspeak’ was and is present on the social media platforms. As such, a search with keywords may miss posts, specially from the ‘unofficial’ narrative. To get all the nuances of the underground data, the snowballing method is more inclusive. It is also argued by Kausar et al. (2021) that even though a Twitter analysis can be done through a hashtag search, this is limited by the researcher’s imagination and knowledge of trending hashtags, as well as language barrier.

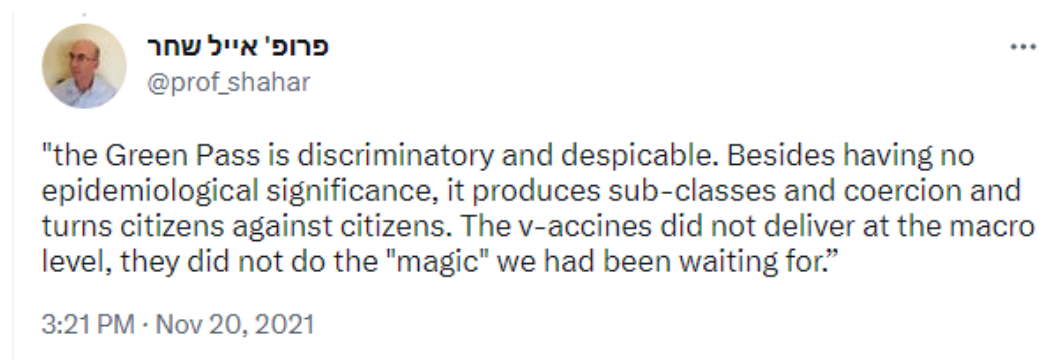


Figure 4-2: Prof David Shachar's Green passport Tweet

In my research I did not use resources available only on private chat groups (such as WhatsApp, Telegram, Viber) I also excluded Facebook, since the blocking and deleting of posts by fact checkers during the pandemic, made this platform unreliable for objective information (Meta, 2022). The development of information, the discrepancies between the official narrative and the situation on the ground, will be explored within the framework of the ‘cake’ layers model (Eysenbach, 2020; Gallotti et al., 2020; Tangcharoensathien et al., 2020; Tsao et al., 2021), where the

flow of information is described as being between social media through e-news to academic literature and back from the peer review articles to news and social media (Figure 4-3). In document analysis a corpus (body of work) is collected, collated, and analysed systematically. Thus, an integrative review approach is useful in identifying the search criteria and search terms to be used in retrieving documents for analysis. Likewise, the analysis follows a systematic coding process to identify themes and patterns in accordance with the reason for the search (Whittemore & Knafl, 2005; Kayesa & Shung-King, 2021).

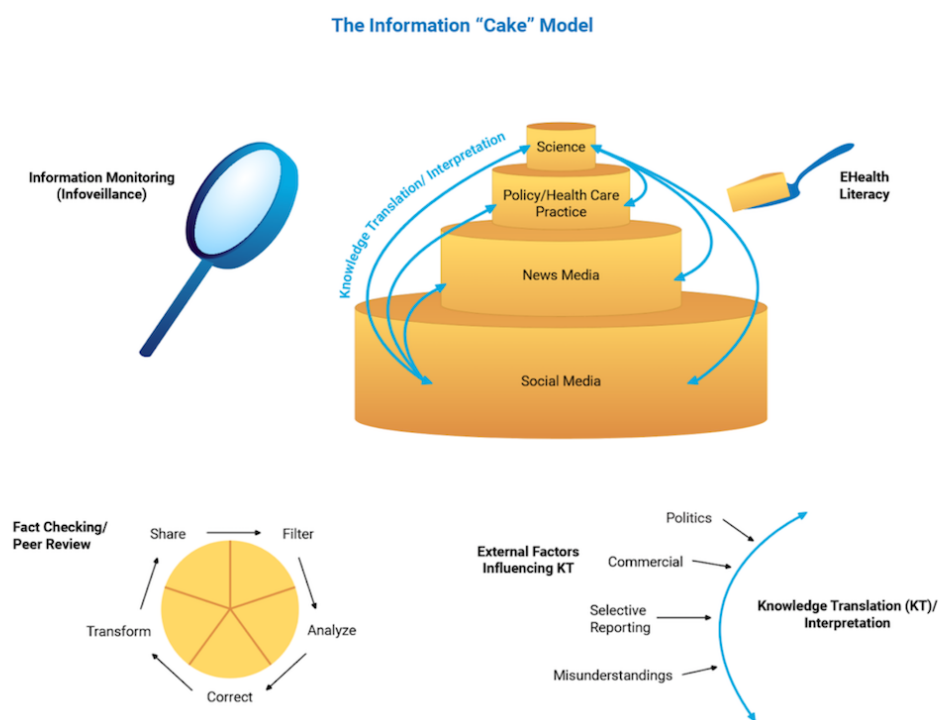


Figure 4-3: *Cake model*

The activity is reflective and recursive and helps to illuminate the context within which the study takes place (Wood et al., 2020). It can be used in combination with other research methods as a means of triangulation, so that a convergence and corroboration of information across a range of datasets can be interrogated (Bowen, 2009; Kayesa & Shung-King, 2021).

4.4.3 Documents related to the management of the pandemic

Documents, such as government directives, public health guidelines, institutional policies, and official communications, serve as key texts that both reflect and shape social practices, power relations, and ideologies during a crisis like the Covid-19 pandemic. The language used in documents is important to reveal the underlying power dynamics, ideologies, and intentions of policymakers. Document analysis in CDA considers who produces these documents and how they are distributed to different audiences, and how the production and distribution methods affect the accessibility and reception of these policies. In accordance with Foucault's work on biopolitics and biopower, this allows the research to identify how policies establish authority and control over people's behaviours, and to examine the tensions between what is directed and what is accepted, and thus, whose interests are represented (or not). Here, the links to genealogy are important, identifying the historical contexts and policy shifts within which the documents have been developed. From this analysis, policy gaps censored and cancelled arguments, issues that are not addressed, voices that are silenced, or problems that are ignored, can be examined.

4.5 Interviews with nurses

Text and context have a "mutually reflective relationship where text influences context and context influences text" (Flowerdew, 2018, p. 166). This requires a continuous checking-in to understand the contextual relevance and reference, remembering that context is dynamic and changes with discourse and also as result of discourse, this discourse is contextual and is three dimensional – the subject of the matter of text; the relations between the participants and how they view the subject; and, the mode by which the discourse is occurring (Fairclough 2001). For this study, the interviews of nurses who had worked during the pandemic across both Israel and New Zealand was used to hear their views and experiences of being a nurse in the pandemic.

In Fairclough's levels of social order, this is the micro level, the hands-on view. Fairclough's approach to interviews focuses on understanding the connections

and tensions between language and social practices, looking for patterns and how meanings are constructed to describe social identity, relationships and power dynamics. The contextual references for this analysis are important, in relation to how the interview reflects or challenges dominant ideologies, norms, and practices (Fairclough, 2001).

Interviews explored nurses' experiences working during the pandemic and the impact of the infodemic, alongside other aspects that affected their capacity to work. Interviews were conducted in English. Facebook was used to recruit participants, specifically nursing groups, 'Israel nurses next generation', 'Nurses making alyah', 'Israeli nurses support group', 'Nursing in New Zealand, 'Nursing Club Manawatu'. The first seven nurses from both Israel and NZ who responded were selected, thus reflecting a convenient sample. Thirteen video zooms and one audio call (in order to respect the privacy of a religious participant), were conducted at a time convenient to the availability of the interviewees, ranging from 4am till 11 pm, Monday to Sunday. Israeli nurses sometimes used common Hebrew terminology, this was left in the transcript with English translation in bracket, example: pnimit [general ward], tav yarok [green passport].

For this study, New Zealand and Israeli transcriptions were initially collated and examined in detail. The full interview transcripts were read and re-read to understand the context and content of the story, notes relating to temporality, spatiality and sociality were made and important narratives were highlighted (Emden, 1998). Patterns and threads were pieced together to create themes and sub themes. Once this has been done for each country, commonalities and differences that emerge from the two countries were identified. "It is not simply storytelling; it is a method of inquiry that uses storytelling to uncover nuance... it provides the opportunity for dialogue and reflection, each intertwined and cyclical" (Wang & Geale, 2015, p. 198).

Analysis of the interviews follows a three-dimensional structure of interaction (personal and social), continuity (past, present, future) and situation (place). A researcher in this space, must 're-tell' the story with respect to the aims of the research (Clandinin, 2007). As such the story told at that time and place is unique.

Roller & Lavrakas (2015) conclude, that “It’s by way of these transcribed accounts of the researcher-participant exchange that analysts hope to re-live each research event and draw meaningful interpretations from the data” (p. 48). Interviews, in relation to CDA involves not only a detailed examination of the language itself but also a consideration of the broader social and institutional contexts in which the interview occurs. The ultimate goal is to uncover hidden power relations and ideologies embedded in everyday discourse.

4.6 Field notes: An autoethnographic approach

Field notes provide a detailed account of the interactions and observations of the researcher. In CDA, field notes complement the analysis of texts by capturing observations, reflections, and contextual information that may not be evident in the text alone. They can be used to triangulate findings from different data sources to help validate or challenge the interpretations derived from textual analysis, ensuring a more comprehensive understanding of the discourse. By using field notes it is possible to gain a better understanding of the context in which language is used and the way people interpreted reality (Corwin et al., 2020). Field notes show the development of the researcher’s own interpretation of the narrative over time. There is a bias in field notes, since “every researcher either knowingly or unknowingly adopts the conventions of one or multiple paradigms. Put simply, a paradigm is a worldview” (Corwin et al., 2020, p. 411). This worldview develops due to the emergence of new experience and means a researcher has biases that need to be keep in check, so as to not include personal interpretations in the research. The development of my accounts of events and personal insights are narratively described in Chapter Seven. This aligns methodologically with my field notes as it captures firsthand experiences, observations, and reflections, which are essential components of qualitative research. These notes provide rich, contextual data that can be used to support and illustrate the analysis, particularly in an autoethnographic approach where the researcher's personal journey is integral to the study. As mentioned, this is my story, situated within the pandemic framework, and explored through a Foucauldian lens of surveillance and self-surveillance.

4.7 Final collation and analysis of findings

As a starting point, I created a timeline for the Covid-19 pandemic, to aid in the mapping of the experiences of the nurses in New Zealand and Israel, the changing rules, and regulations they needed to adhere to, to see if and how the events on the ground shaped the pandemic policies in both countries, and how the guidelines reflected the official Covid-19 statistics (Appendix 3). My timeline starts in February 2020 and ends with opening the borders for vaccinated individuals in New Zealand in July 2022. I constructed this timeline as a reminder of the core events of the pandemic, an historical backbone against which I could frame the narratives of the nurses and the document analysis, and to follow the developing of the Covid-19 story (Mathieu et al., 2020). Data was retrieved from 'Our World in Data' web sites on October 31, 2022. The charts are free to reuse, adapt and share for any purpose under CC-BY license. The web site utilises statistical data from Universities of Harvard, Stanford, Berkeley, Cambridge, MIT, and Oxford. In the Covid-19 section, 329 charts were available for re-use for research purposes. To build my timeline I used data from Policy responses, Covid-19 death, Country profiles and Testing charts. On the timeline I plotted lockdowns, vaccinations, vaccination passport/mandates and variants since those themes influenced the nursing workforce of both countries that formed part of this study.

I sought to compare the pandemic constraints in both countries, Israel and New Zealand. The site, Our World in Data, uses stringency metrics to calculate the pandemic response in each country: school closures, workplace closures, cancellation of public events, restrictions on public gatherings, closures of public transport, stay-at-home requirements, public information campaigns, restrictions on internal movements, and international travel control (Mathieu et al., 2020). I chose to include Covid-19 death rates to show the development of the pandemic. The numbers of positive cases depended on outside influences, the number of tests performed as a ratio to population fluctuated during the pandemic, and the criteria for testing was too different between the two countries to be useful for my purpose.

Content analysis is a way of describing and quantifying texts by extracting information and refining the meaning into categories, it can be either inductive or deductive, depending on the type of research being undertaken (Elo & Kyngäs, 2008). Content analysis allows for the collation of all textual data into a summary that enables the development of linkages between research objectives (Krippendorff, 2018). For studies that have little or no prior knowledge or are fragmented, the inductive approach is recommended (Shang, 2021), and this approach was chosen for this study, moving from specific to general findings. The process for data analysis included three essential steps, preparation, organisation, and reporting. Data was collated from the various methods employed in this study, the genealogy, the document analysis, field notes and the interviews. The data focused on the original research question and sub questions posed, ‘what was happening’; ‘who does it represent’; ‘when did it happen’? At this stage the collated data from all the research steps were read and re-read, to assist in finding patterns and themes. Constant reference was made back to each of the research steps’ empirical data. For example, the interview transcripts were reviewed again for information that led to certain patterns being uncovered, or documents were explored again for further clarification of a theme or sub theme. The steps, as outlined in Elo & Kyngäs (2008), were followed (Table 4-1, see page 72).

Organizing the data on a thematic base allowed me to explore the development of themes throughout the three years of the pandemic, to compare the similarities and differences in Israel and New Zealand. After sorting the material by themes, I used Fairclough’s discourse development method to examine the effect knowledge had on the progress of the situation. By looking at the development from situational determinants to the situational effects I hope to gain a better understanding of the discourse that influenced the change.

The analysis of collected data has been done methodologically according to the rules using Critical Discourse Analysis (CDA), as argued in the previous chapter. Fairclough (2003) explains that analysis involves a systematic examination of written or spoken texts to uncover underlying power relations, ideologies, and social

structures that shape and are shaped by language use. This approach emphasizes the interconnectedness of language, discourse, and society, and aims to expose hidden meanings, biases, and assumptions within texts. Thus, all the information from the interviews, field notes and documents, were drawn together for the final analysis, utilizing Fairclough's three-dimensional framework. First, I examined the written word, to explore how the Covid-19 narrative was represented from the start. The texts were analysed using Fairclough's (Fairclough and Fairclough, 2018; Fairclough, 2013) model with three dimensions; 1) description (text analysis), 2) interpretation (processing analysis), and 3) explanation (social analysis). The texts were closely examined in line with the aim of the study, the power relations and ideology were examined to see how the discourses construct the reality and how reality construct discourses. This step is presented in the discussion section, as argued in Fairclough (2018).

Written words and memes shape our understanding of reality and as such media influences our comprehension of reality. The first images in February 2020 from Chinese's Wuhan, north Italy, and New York, introduced people in full protective gear, intubated patients in prone position, and never-ending statistics. The unifying message of an emergency situation continued throughout the pandemic, with stories about courageous health care workers battling the virus. For my case study I collected texts from grey literature, mass and social media, analysed interviews with nurses and finished with an interpretation process which summarized my findings. An explanation of the relationship between the pandemic discourse and society, as outlined in Fairclough (2006), was the last step in uncovering how the power relations are manifested and reinforced through text. Explanation is, "A matter of seeing a discourse as part of processes of social struggle, within a matrix of relations of power" (Fairclough, 2015, p.163), and identifying the dominant discourse by looking for hidden meaning and issues across the three levels of social organizations. The situational lens, the state of exception of Covid-19 pandemic, the institutional point of the nursing profession tied to licensing regulations, are examined (Refer to Figure 4-5, page 79).

Analysis of data retrieved from Israel and New Zealand was done under the umbrella of a timeline to develop the Covid-19 narrative (Appendix 3). The official narrative, projected in mass media, was collated together with the more hidden, underground voice of the alternative narrative, mostly present in social media, because as will become clear nurses accessed this data in the absence of official supportive directives. The voices of the nurses, stories from the hospitals and clinics, the personal unique experience of the professionals at the front line, reveals the micro lens. Quotes in the text are provided to allow for authentic voice (Creswell & Creswell, 2018; Creswell & Poth, 2016).

I further discuss my findings by using the WHO recommended ‘Information Monitoring’, especially following the ‘cake model’ suggested by Eysenbach (2020). I explored the ‘knowledge translation interpretation’ of Eysenbach, and Fairclough’s suggestion of ‘discourse’ development by knowledge and experience, using the findings of data I obtain from social media, news media, policies, health care guidelines, as well as scientific literature, thus covering every layer of the cake. I discussed the fact checking and peer review influence on information development, as well as the positive and negative impacts of information monitoring, as suggested by WHO.

4.8 Trustworthiness of the data

Trustworthiness of data is important. The results should be described in enough detail for readers to follow the train of evidence, and to provide recommendations for future use and in the case of this study, translation into practice. The empirical data, the information that has been collected, is provided throughout the report as quotes from the interviews, or as references from documents. Tables and appendices are used to support findings in the report.

4.8.1 Triangulation

Cypress (2017) sees the term qualitative rigor as an oxymoron, since qualitative is an interpretation, and a discovery journey. For my voyage I used data analysis and interviews to show different interpretations of the reality and to assist me

in the objectivity of my qualitative study. Using different methods for data collection helped to validate, compare, and cross-reference different understandings of the same problem. “Complementary triangulation produces a fuller picture of the research problem by combining data from different methods” (Nightingale, 2020, p.3). Combining case study, archaeology / genealogy, and interviews under the umbrella of CDA with relevant tools, provided the opportunity to explore pandemic reality through different lenses. Analysis of documents revealed the mood of the last three years, especially mass and social media with very dramatic titles and explicit pictures serving as a reminder of the times we lived through. Interviews, the micro level, put everything into perspective, it is a reality seen through the lenses of the main players of the Covid-19 pandemic: nurses, who were trying to continue with their ‘call of duty’ in a new, scary, and unpredictable situation.

As a researcher I needed to keep in check my own experiences, not to let my subjectivity influence my interpretation of the data (Pannucci and Wilkins, 2010). Researcher bias is a threat to validity of the research because qualitative research is open and less structured than quantitative findings. Researcher bias can result from selective observation and selective recording of information and from allowing one's personal views and perspectives to affect how data are interpreted and how the research is conducted (Galdas, 2017). Therefore, it is very important that I remained aware of my own perceptions and opinions. When interviewing nurses, I did not correct them during interviews, even when they were remembering facts incorrectly, such as wrong dates for lockdowns, or incorrect statistical references, etc. I interviewed participants on a first come, first serve bases, and as such assured avoidance of bias or prioritization. However, this approach means I missed the opportunity to balance my population, for example even though NZ nurses are 25% internationally trained, and my sample includes only one foreign nurse.

Since Israel’s first world vaccination drive and New Zealand’s zero Covid strategy represent two unique pictures in the world of Covid-19, there are many articles and comments available about the management of the pandemic from both countries. It was important for the research, to demonstrate the **mood of the moment** in both countries. Care was taken to include a balance of information, drawing on

positive as well as negative reports, to assure validity of the data. Official information from the Ministry of Health of both countries, and government web pages were also integral parts of the research, as well as critique of the government's approach.

4.8.2 Ethics

Ethics application was submitted on July 13, 2022, and approval was received on September 6, 2022. Conversational interviews with 7 nurses from New Zealand and 7 from Israel in their own professional capacity were conducted in November 2022. Participation was voluntary and did not pose a risk to their work or their license. An information sheet outlining the projects' intent was provided, along with a consent form to participate. Consent was confirmed again at the beginning of the interview and the option to stop the recording at any time was emphasised. At the end of the recordings each participant was reminded of the one-month option to ask for their interview to be deleted and not used. Even though each and every nurse was comfortable to use her/his first name, nicknames to shield their identity were used, and the name of the place of work were not used in transcripts.

All interviews were undertaken using virtual technology whilst the risk of Covid-19 infections continued. The interviews were recorded and transcribed by me. All participant information collected for this study was stored in a secure folder at Massey University for the duration of the study, in an identified format. No names or any other identifying information that might link the participants to the study will be made public in any report, presentation, or publication. On completion of the study, all paper-based information will be shredded and only a password protected digital copy of the information will be stored at Massey University in accordance with research record keeping legislation.

Chapter Five: A Scoping Review

The Covid-19 pandemic has placed extraordinary demands on the nursing workforce. The sustained pressure on nurses has raised significant concerns about their mental health and well-being. In this context, a critical examination of the pressures and support mechanisms available to nurses is important. Understanding how to best support our nursing workforce becomes increasingly crucial if we are to prepare for future health crises. A review of the existing literature is a first step towards understanding the resilience, well-being, and effectiveness of nurses, who are indispensable within healthcare systems. This chapter provides an overview of the academic literature that explores the support nurses and well-being of nurses working during the Covid-19 pandemic. The methods used for the search are outlined in the following sections, the similarities and differences in the emergent themes between Israel and New Zealand are explored and discussed (Levac et al., 2010).

As argued by Munn et al. (2018), a scoping review is "useful for examining emerging evidence when it is still unclear what other, more specific questions can be posed and valuably addressed by a more precise systematic review" (p. 3). Scoping reviews can therefore be used to provide a comprehensive overview and summary of existing evidence, rather than generating definitive conclusions or estimates for decision-making. Given the rapidly evolving nature of the pandemic and its impact on healthcare workers, this approach allows the literature to be mapped thereby facilitating the identification of key trends, concepts, and gaps in our current understanding. This review follows the methodological framework adapted from Arksey and O'Malley (2005), ensuring a systematic and comprehensive approach to literature synthesis. It is important to note that this scoping review does not aim to generate definitive conclusions or provide specific recommendations for decision-making. Instead, the objective is to provide a comprehensive overview and summary of the existing evidence.

The significance of this review lies in its potential to help inform the development of targeted interventions and support systems for nurses working in pandemic conditions. By synthesizing the current knowledge on nurses' needs, experiences, and the support measures implemented across different healthcare settings. In turn, this can provide valuable insights to inform policy, healthcare initiatives, and areas for further research.

5.1 Aim and objective

The aim of the review was to identify the support nurses working during the Covid-19 pandemic received in order to prevent burnout, stress, or compassionate fatigue. The objective - was to identify the needs of individuals, the nurses, within a specific context, such as Covid-19 pandemic.

5.2 Review question

The question was developed to align with the Population, Concept, and Context [PCC] framework. The Population was defined as nurses working during the pandemic, the Context was Covid-19 pandemic, and the Concept was the support nurses received in order to prevent burnout, stress or compassionate fatigue. The identified scoping review question was 'What support did nurses working during the Covid-19 pandemic received - to prevent burnout, stress, or compassion- fatigue?'

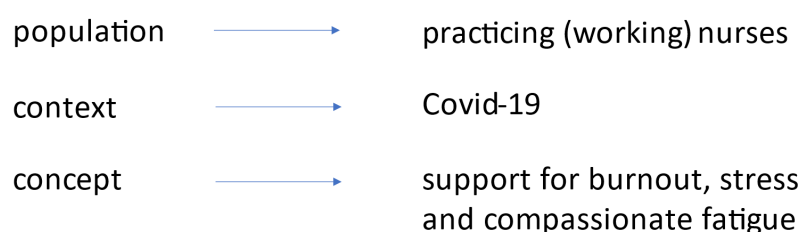


Figure 5-1: Population, Concept, and Context Framework

5.3 Methods

The methods undertaken are outlined in Figure 5-2 and follows the approach described by Arksey and O'Malley (2005). First, the research question, is stated using the PCC (Population, Concept, Context) framework. The inclusion and exclusion criteria for study selection is indicated, ensuring a systematic approach to screening titles, abstracts, and full texts. Next a comprehensive search strategy, detailing the selection of databases and the use of specific keywords and Boolean operators is specified. The PRISMA-ScR was used to maintain transparency and rigor in the review process. Lastly, the process for data extraction, charting and analysis is described.

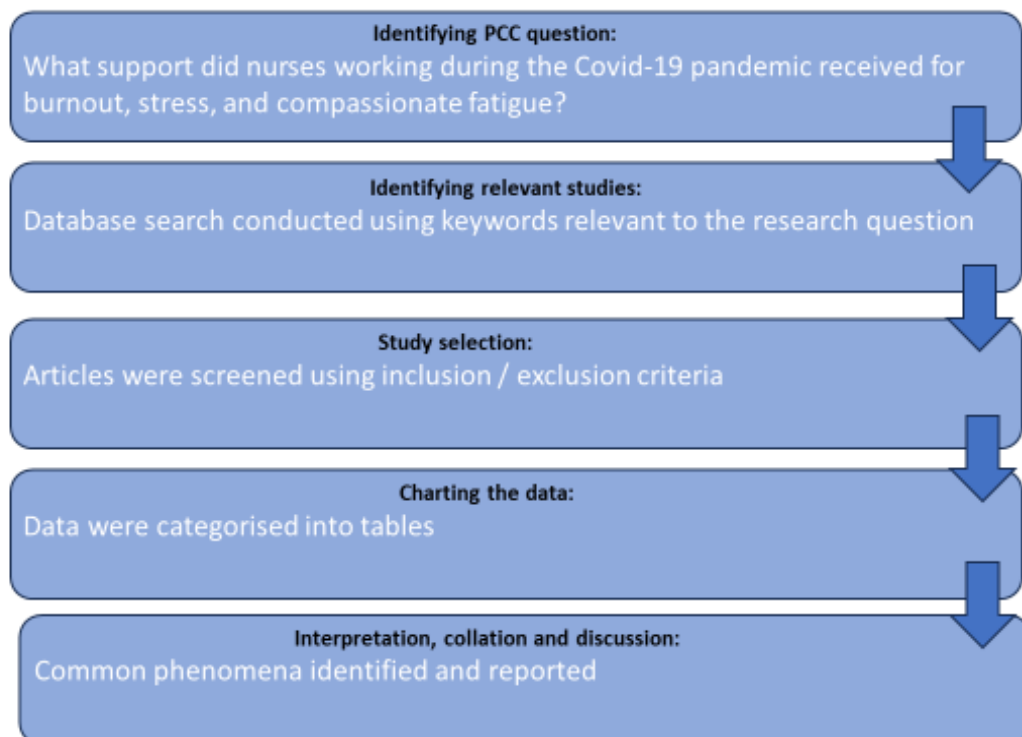


Figure 5-2: Scoping review

5.3.1 Eligibility criteria

Articles published between 2020-2022 were examined for inclusion. English language, full text articles, and related to New Zealand and Israel were the criteria for the papers being accepted. Articles not applicable to the research question were excluded. For example, a number of papers published in 2020 dealt with the situation in residential nursing homes and the impact of the Covid-19 virus on the elderly (Comas-Herrera et al., 2020; Hirdes et al., 2020). These were excluded as the majority were not relevant to the research question and did not refer specifically to nurses. The specific inclusion and exclusion criteria are listed in Table 5-1.

Table 5-1: Inclusion and exclusion criteria

Inclusion	Exclusion
Articles related to nurses, nursing students, nursing aides, health care workers, hospital workers	Articles related to physicians only
International studies that included Israel and/or New Zealand	Articles from countries other than Israel or New Zealand or those from Australia that did not mention New Zealand
Articles discussing Israel's vaccination drive mentioning the health care system and the role of nurses	Articles about Israel's vaccination without discussion of nurses or health care staff
Full text articles in English	In languages other than English
Policies and guidelines mentioning nurses and health care workers	Articles discussing New Zealand's Covid-19 strategy without mentioning of nurses/healthcare workers
Articles mentioning Covid-19, Coronavirus, SARS-CoV2	Articles not related to Covid-19 pandemic
Published between 2020 and 2022	Published before 2020 or after 2022

5.3.2 Types of sources

A scoping review encompasses various study designs, including randomized controlled trials, non-randomized controlled trials, before and after studies, surveys, prospective and retrospective cohort studies, case-control studies, analytical cross-sectional studies, as well as descriptive observational study designs such as case series, individual case reports, and descriptive cross-sectional studies. All study designs were considered for inclusion in this scoping review (Pollock et al., 2021).

5.3.3 Search strategy

Databases were selected, and a search strategy developed, using appropriate keywords, subject headings, and Boolean operators. Four bibliographic databases (Web of Science, Scopus, CINAHL and Medline) as well as Google Scholar were searched. The first step identifies the key papers for each country. The following key words with Boolean operators were used to undertake the search:

Covid-19 OR coronavirus OR 2019-ncov OR sars-cov-2 OR cov-19

Nurs* OR nurse OR nursing OR nurses OR healthcare professional OR health personnel

burnout OR burn-out OR burn out OR stress OR occupational stress OR compassionate fatigue.

Two searches were carried out using the above-mentioned keywords in combination with 'Israel' for one search and with 'New Zealand + Aotearoa' for the second search. Due to the nature of the research, and the need to track up to date papers, Google Scholar was included, and a search conducted by years (2020, 2021, 2022) in ascending order, with the search limited to the first 200 articles per year. Sorting by year allowed for a chronological organization of the search results, which is useful when studying the development of a topic over time, or tracking trends and progress (Basten & Jiang, 2023).

5.3.4 Data extraction

Data extraction tables for retrieved articles are presented in more detail in Appendix A and include specific details about the concept, context, study methods and key findings relevant to the review question. Publications were tabulated separately for Israel and New Zealand, with author, date, title, methods, findings, and conclusion/ recommendation being used as column headings in the relevant tables.

5.3.5 Data synthesis and analysis

The final list of retrieved articles was grouped by countries (Israel and NZ) and years (2020, 2021, 2022) This allowed for a comparison of themes, and to examine if there were marked differences between Israel and New Zealand given the differences in Covid-19 positive numbers between the two countries. Extracted data was organized and synthesized by summarizing the main points within each paper where qualitative data was organized into descriptive categories and emergent themes using the general inductive approach (Thomas 2006). The focus was on capturing the essential aspects of the studies, while avoiding excessive detail and overlap.

Charting, and using visual tools, such as tables and diagrams were used to present data. A synthesis was presented in a narrative form. Bibliometrics were also included to provide insight into the dynamics of the information produced over the course of the two years of the Covid-19 pandemic and the level of activity and publication output addressing nursing experiences. Formal critical appraisal and risk of bias assessments are not necessarily required in scoping reviews, when the purpose is to map and describe rather than make inference or recommendations (Pollock et al., 2021). In this review any potential conflict of interests were noted, and study design and methodology were examined, as well as legitimacy of findings.

5.3.6 Search results

Inclusion and exclusion criteria were utilized to screen and select relevant studies. Initially, titles and abstracts were screened to identify potentially applicable articles, followed by a full-text review to determine final inclusion. PRISMA-ScR

was used to enhance transparency and the quality of the scoping review. The number of articles in Google Scholar changed daily. On December 31, 2022, the search resulted in 19,100 articles for Israel and 24,500 for New Zealand. Most of the papers were editorials, opinion pieces, and general articles mentioning New Zealand's lockdown policies, and Israel's vaccination drive in the winter of 2020/2021, as can be seen in PRISMA Tables 5-2 and 5-3. The first 20 pages (10 articles per page) with 200 articles for each country were reviewed in more detail, with eleven for Israel and six articles for New Zealand found to meet the inclusion and exclusion criteria, as mentioned previously (Appendix 9.1).

One hundred and fifty-one articles for Israel and sixty-three articles for New Zealand were retrieved from above mentioned databases (Scopus, Web of Science, PubMed, CINAHL and Medline). The papers are presented in two separate PRISMA tables for ease of synthesis. In total across both countries fifty-nine papers (42 Israel, 17 New Zealand) met the inclusion criteria as outlined in the PRISMA Table 5.2 and Table 5.3

Table 5-2: Prisma Israel

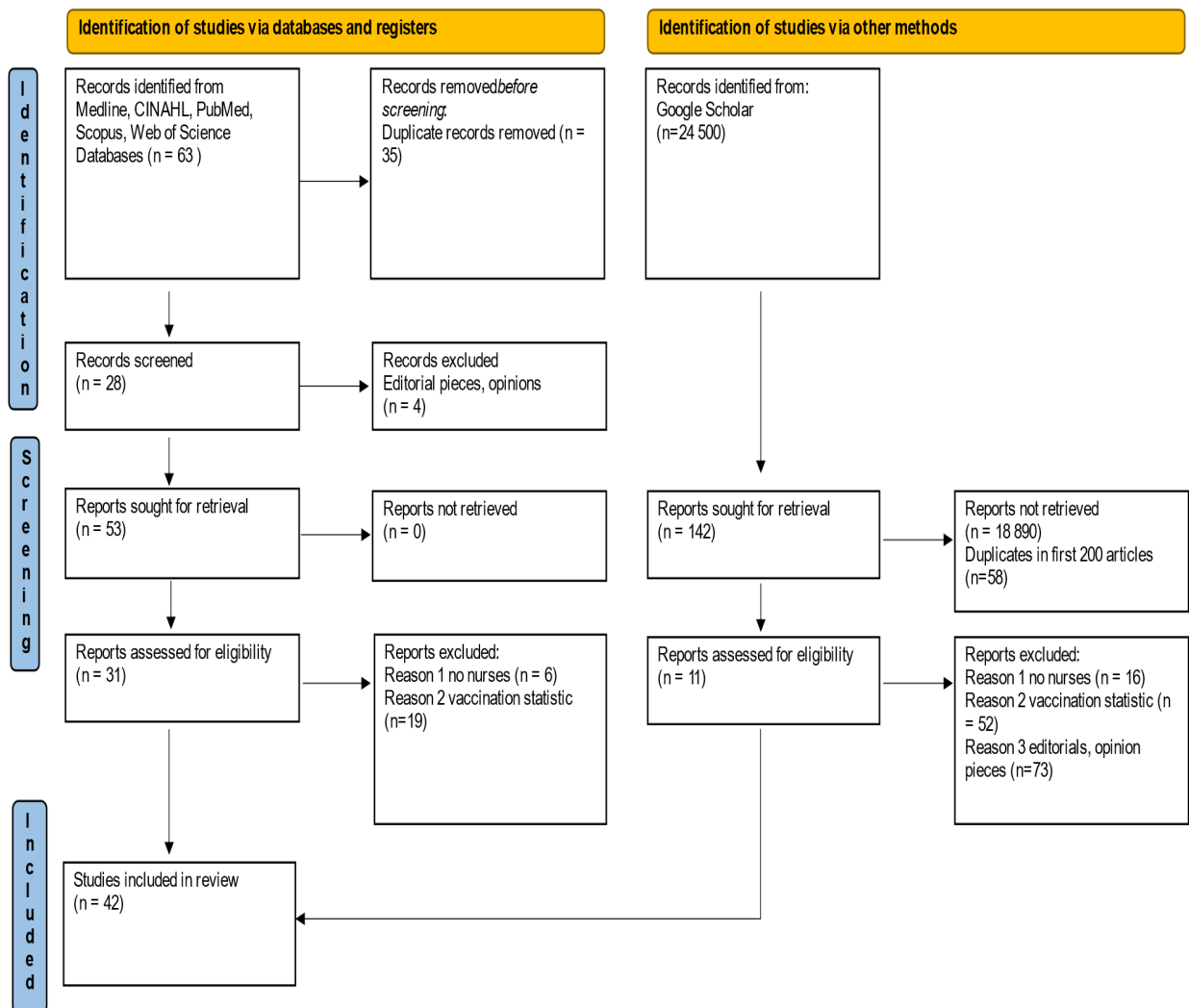
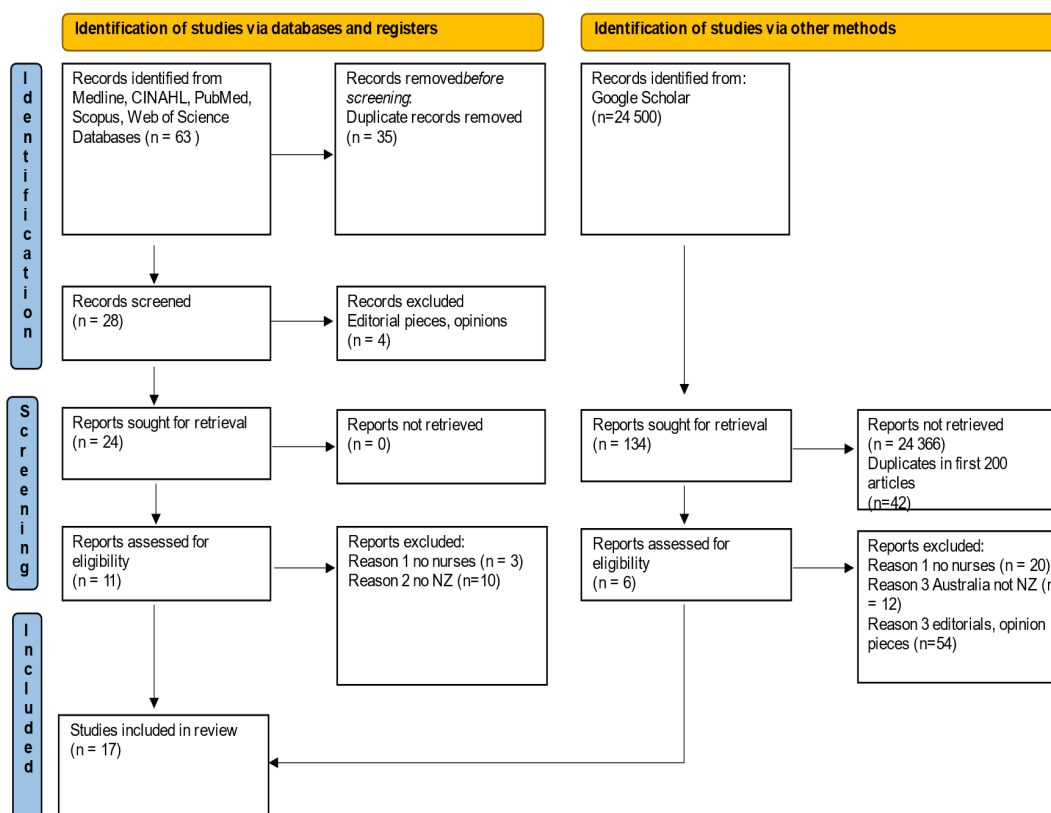


Table 5-3: Prisma New Zealand



5.4 Findings & themes

The presentation of the findings is divided into two sections. The first includes a report of the bibliometrics of the findings, while the second delves into the identified common and unique themes from the analysis of the fifty-nine selected papers.

The number of articles related to nurses increased during the three years of the pandemic, as can be seen by the research results in Figure 5-3. This supports the findings by Ioannidis that there was a ‘covidization’ in research: “The rapid and massive involvement of the scientific workforce in Covid-19-related work is unprecedented and creates opportunities and challenges. There is evidence of hyper-prolific productivity” (Ioannidis et al., 2021, p. 1).

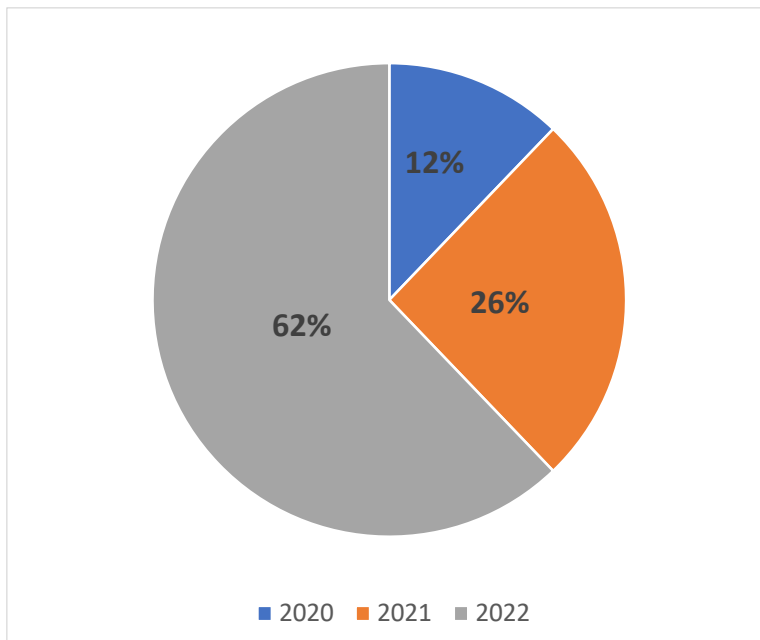


Figure 5-3: Increase in articles in the three years of Covid-19

5.4.1 Characteristics of included studies and bibliometrics

The majority of the articles retrieved in Israel were qualitative and mixed methods surveys. Data was collected from nurses, health care workers, hospital workers, nursing students and nurses from geriatric facilities as seen in Appendix 1.1. Two articles were not surveys. Tsadok -Rosenbluth et al. (2020) examined policies relevant to working during pandemic and Glatman-Freedman et al. (2020) collected data on workers in health care facilities in Israel.

In New Zealand Crowther et al. (2021) did a systematic scoping review on NZ's Covid-19 response in maternity and midwifery services, and Hirdes et al. (2020) analysed policies affecting health care workers. The participants of remaining articles from NZ were mostly nurses, nursing students and geriatric facilities workers, as can be seen Appendix 1.2.

As such most articles were studies based on surveys asking nurses to report on the challenges of working during the pandemic, the effects of lockdowns on their

well-being, the ethical and moral questions faced in the new work environment (Cook, et al., 2021; Savitsky et al., 2021; Sperling, 2021a; Sperling, 2021b; Dopelt et al., 2022; Hammond et al., 2021; Marey-Sarwan et al., 2022; Slykerman et al., 2022; Sperling, 2022; Melnikov, 2022; Yarad et al., 2022). Savitsky (2021) and comparisons of working on Covid-19 and non-Covid-19 wards. The difficulties of being a virtual nursing student for those still in training were examined by Thompson et al., (2022b) and Jagroop-Dearing et al., (2022).

Five themes common to both countries were identified. These included ‘Knowledge as a tool’, ‘Policy adjustments to crisis’, ‘Psychological impact’, ‘Coping, resilience, satisfaction’, and ‘Ethical and moral questions’. Two, country specific themes, were identified, namely: ‘Covid ward and vaccination’ for Israel and ‘The question of Māori and Pacifica and leadership’ in NZ.

5.5 Emergence of themes across the pandemic years

The prominent themes throughout the three pandemic years for Israel were the impact of the Covid-19 on the mental health and resilience of health care workers; the shift in policies across the three years as the pandemic developed; increasing knowledge about the virus; prevention; search for data; and information overload. Questioning the ethics of decision making and vaccination were the major themes of 2021 and 2022.

The emerging issues in 2020 for New Zealand were depression/burnout; coping/resilience; and the situation of minority nurses in view of the virus being nicknamed ‘Wuhan’ and the burden of this label on foreign nurses, especially those of Chinese descent (Song & MacDonald, 2020). In 2021 three more themes emerged, policy changes during the emergency; leadership and personal growth of nurses; as well as the moral dilemma of personal safety versus care for patients. In 2022 the number of articles on depression/burnout and resilience increased dramatically.

Figure 5-4 below shows the development of topics during the pandemic year. Articles from both New Zealand and Israel discussed the increasing mental health challenges faced by health care workers. Out of the total of fifty-nine papers, burnout

and secondary trauma are mentioned in thirty-one papers, resilience and coping in fourteen. The increase of articles on mental health issues over the three pandemic years is demonstrated, with the majority of the papers emphasising that despite the personal risk and emotional burden, nurses were dedicated to providing the best care possible to their patients, demonstrating clear resilience. Recommendations to provide mental health support were voiced, however, no concrete tools or strategies were offered.

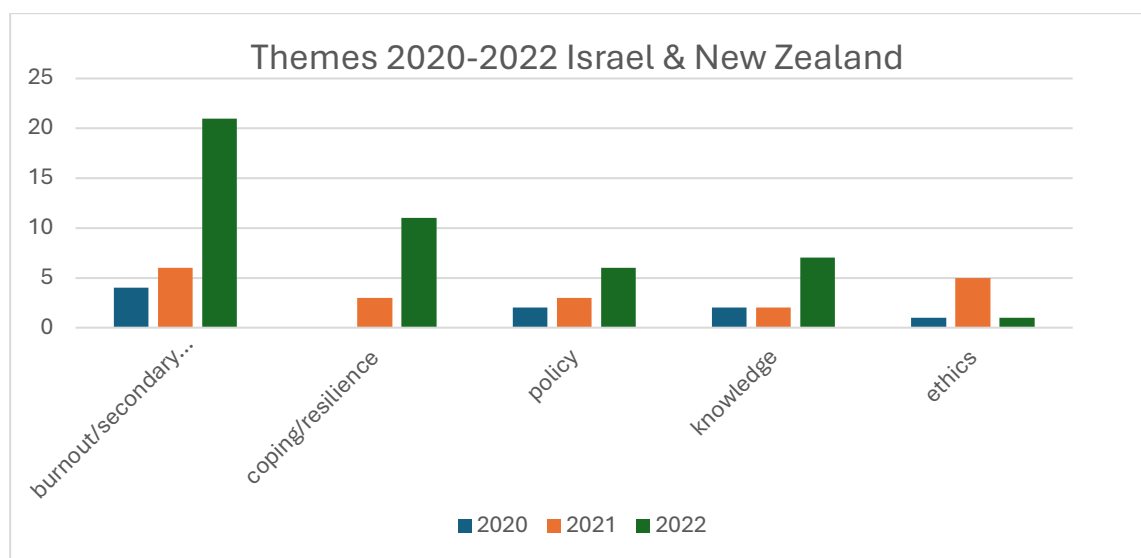


Figure 5-4: Development in themes in articles for Israel and New Zealand

5.5.1 Theme 1: Knowledge as a tool. Mitigating the fear of unknown

Access to reliable and accurate information emerged as an important factor in supporting healthcare workers' well-being, including nursing students during the pandemic (Dubovi et al., 2022; Savitsky et al., 2021). However, this intuitive protective factor is complicated by the broader context of the "infodemic" that accompanied the pandemic. Nurses, especially those in direct contact with COVID-19 patients in Israel, actively sought information as a coping mechanism to manage uncertainty (Marey-Sarwan et al., 2022; Marey-Sarwan et al., 2021). This proactive approach, while potentially empowering, also exposed nurses to the double-edged

sword of information overload and misinformation. The consequences of this had a significant impact in both New Zealand and Israel. In Israel, the rapid proliferation of both publicly made information and misinformation contributed to an increase in workplace violence against nurses (Dopelt et al., 2022). In New Zealand nurses reported experiencing "cognitive exhaustion and the influence of information overload" during the pandemic's initial phases (Cook et al., 2021a).

Attempts to manage the information flow in Israel, lead to the establishment of a centralized call centre that initially seemed promising. However, its subsequent closure created a significant void in information access (Glatman-Freedman et al., 2020). The New Zealand experience offers a different perspective with the involvement of Indigenous nurses leading to culturally safe education and increased Covid-19 testing rates (Clark et al., 2021). The success of this approach highlights the value of leveraging nurses' community-specific knowledge and cultural sensitivity within public health initiatives. The experience of three nurses, using their knowledge of mātauranga Māori during the pandemic is discussed by Davis et al. (2021). The feeling of responsibility for the community was expressed by the nurses: "I felt the weight of being a Māori nurse, that our Māori community was going to be hardest hit" (p. 87). This paper emphasised the need to involve Māori nurse leaders in primary healthcare and shared their stories as an example of resilience and courage. However, the principle of mana Matuhake self-determination was not fully implemented during the vaccination drive (Davis et al., 2021), revealing a disconnect between recognizing the value of diverse nursing perspectives and fully integrating them into healthcare decision-making processes. Highlighting the importance of having sustainable, long-term information management strategies in crisis situations and high-stress environments that not only provide information but also help healthcare workers process and apply it effectively. It also suggests that effective support goes beyond merely providing information or resources but that it requires a holistic approach that considers the cognitive and emotional impacts of information management, the cultural contexts of healthcare delivery, and the integration of nurses' expertise at all levels of decision-making.

5.5.2 Theme 2: Policy adjustments to crisis

Both systemic issues and potential solutions emerged as from the policies and directives that impact the workforce, and care settings. The experiences of nurses in different countries provide valuable insights into the global nature of these challenges. In New Zealand, nurses at Christchurch hospital reported initial chaos and fatigue due to constantly changing guidelines, particularly regarding protocols for patients awaiting Covid-19 test results (Clark et al., 2021). In this study the nurses all mentioned the initial chaos and expressed fatigue with the constant changes in guidelines, especially the lack of clear policies for working with patients waiting for Covid-19 test results, and how, when, and where to move patients with negative test results. They also felt that there was little acknowledgement from management of the health care workers' devotion to care of patients (Thompson et al., 2022a). In Israel the issues identified included inconsistencies in training of the health care workers on the ground (Goldfarb et al., 2021), and the lack of clear protocols and guidelines (Melnikov et al., 2022).

Contrary to this, an international, on-line questionnaire by Desroches et al. (2022) directed at nurses from US, EU, Australia, and NZ, found high organizational support, such as flexibility in scheduling and paid time in isolation applied to all nurses. However, these nurses also reported 'Covid-19 fatigue' from distancing and masking. The study emphasised the need to include nurses in healthcare and policy decision making. Similarly, in Israel, Cohen-Mansfield and Meschiany (2022) emphasized the critical issue of staff shortages, arguing for the need for extra staff not only during pandemics but also during normal times. Which was also aligned with findings from New Zealand, where Hughes et al. (2021) who noted the marginalization of nursing care from mainstream healthcare and called for increased support for care workers.

The need for appreciation of frontline workers was also indicated by Cook et al. (2021a) who examined the strengths of healthcare workers and concluded that nurses prioritise patient care and acted as substitute family for them and the residents in Covid-19 isolation. In NZ Thompson et al. (2022b) also discussed nurses' stress

due to being unable to fulfil the expectations of family members, who were not able to be with their loved ones. One nurse said: “I deal with palliative patients all the time, but I found I could digest that better than I could telling the husband, ‘No, you can’t come and see your wife” (Thompson et al., 2022b, p.6). Efforts of staff to provide Zoom and facetime for hospitalized seriously ill and dying patients were reported, but it was also mentioned that these actions were initiatives taken by the nurses themselves.

In acute care settings, emergency policies and directives introduced in response to the pandemic were a focal point of discussion in 20% of the retrieved articles. These studies highlighted inconsistencies in training and a lack of clear protocols, which exacerbated the stress experienced by healthcare workers (Goldfarb et al., 2021; Melnikov et al., 2022). In Israel the role of senior nurses engaged in triage committees in cases where there was a lack of resources was examined by Clarfield et al. (2020). Distributive justice and triage considerations were discussed given the situations in New York, north Italy and Spain, and a conclusion drawn “in the spirit of no maleficence, the frail, very old, and severely demented would be actively protected from dying on ventilation” (p.1). The report emphasised that options discussed are to be considered in a “true emergency situation...with the hope we should be fortunate enough never to have to implement such a program” (p.8). The organisational atmosphere in the hospitals and worker’s perceptions and concerns were studied by Bashkin et al. (2021), who recommended better organisational support. To address these issues, Melnikov et al. (2022) proposed the appointment of a pandemic coordinator to provide information and support to healthcare staff, suggesting a need for more structured crisis management. The implementation of clear communication was also found to be an important support measure for nurses by Hamama et al., (2022). and a recommendation for a platform that would allow the nurses to address their concerns and share coping strategies (Hamama et al., 2022).

The impact on long-term care facilities was also significant. Surveys conducted on effective policies for these facilities revealed concerns about visitor restrictions, staff shortages, and vaccination and testing policies (Cohen-Mansfield, 2020; Cohen-Mansfield & Meschiany, 2022; Tsadok-Rosenbluth et al., 2020; Domi et

al., 2021). An Israeli emergency operation for nursing homes with a code name 'Mothers and fathers shield' was mentioned during a WHO policy brief 'Preventing and managing Covid-19 across long-term care services around the world' (WHO, 2020). Tsadok-Rosenbluth et al. (2020) analysed guidelines the state actioned for protecting the elderly. The report discussed testing, assistance from the Home Front Command and the army, and the need for social distancing. It recommended an urgent establishment of Covid-19 departments within each facility. Despite the clear policy directives for disaster management, when the pandemic started, guidelines were not implemented on all levels. Lev and Dolberg (2022) in September 2020 interviewed geriatric assisted living facility workers and cite the concerns of the head nurse. "On the day of the outbreak ... no one told me what to do with the residents when they got sick. I just ordered ambulances, one after another, until a district doctor called me and said, listen, you killed the hospital, they have no place left. I said, so what do you want me to do? Did any of you pick up a phone and tell me what to do? Nobody told me what to do, guys. I informed you. You did not tell me what to do" (Lev & Golberg, 2022, p.12). The policies were available, but it seems the directives were not communicated to the workers on ground. Interestingly, Hirdes et al. (2020) found that despite low outbreak rates in New Zealand, nurses in long-term facilities reported considerable stress related to managing COVID-19 risk. Suggesting that support should be prioritised and tailored to areas with more vulnerable patients and the nursing staff responsible for them.

5.5.3 Theme 3: Psychological impact and nursing support

While the literature acknowledges the challenges surrounding anxiety, burnout, secondary trauma, and compassion fatigue, there is a complex interplay of support but also significant gaps. Several studies highlight the importance of emotional support and leadership training in mitigating the psychological impact of the pandemic on nurses (Bashkin et al., 2021; Cook et al., 2021a; Goldfarb et al., 2021). Early studies from Israel and NZ reported anxiety, social rejection, and loneliness by nurses due to fear of possible spread of infection to their families (Benbenishty et al., 2022; Dopelt et al., 2021; Longmore, 2020; Nissan et al., 2021; Savitsky et al., 2020). The need for more training and emotional support from the

leadership was discussed by a number of researchers in both countries (Bashkin et al., 2021; Cook et al., 2021a; Goldfarb et al., 2021). Details about the recommended tools for gaining the necessary training or emotional support were usually not given. Research by Milgrom et al. (2020) compared nurses working with Covid-19 and non-Covid-19 patients and found no increase in anxiety on Covid-19 wards. Two years later a survey by Cleper et al. (2022) compared sleep difficulties in frontline health care workers in Covid-19 and non-Covid-19 departments and found disturbed sleep patterns amongst Covid-19 staff. Research also found that nurses experienced more burnout than other health care workers (Cohen-Mansfield, 2022; Dopelt et al., 2021), with higher anxiety, depression, and burnout on the increase (Kagan et al., 2022; Karni-Efrati et al., 2022; Khouri et al., 2022). Green et al. (2022) explored the experiences of Covid-19 ICU nurses during the first two pandemic waves (February - May 2020, September - November 2020). The findings showed that constant fighting for life of their patients had a negative effect on the nurse's mental health, and they reported increased psychological stress. The authors saw an acute need for an appropriate support system for nurses. The death of a patient was a risk factor for PTSD for Covid-19 ward workers identified by Mosheva et al. (2021).

Green et al. (2022b) found nurses boosted their emotional strength by sharing feelings with other caregivers and family. Interestingly, peer support networks emerged as valuable coping mechanisms, with nurses reporting that sharing feelings with colleagues and family members helped boost their emotional strength (Green et al., 2022b). However, despite recognising the need for more assistance, the lack of concrete recommendations in the literature for implementing effective support systems is an important gap (Haar & Mowat, 2022; Leaf & Murray, 2022). The pandemic also introduced unique stressors, such as nurses acting as substitute family for isolated patients (Cook et al., 2021a; Crowther et al., 2021) and managing family members' unmet expectations (Thompson et al., 2022b). These challenges highlight the need for more adaptive and flexible support systems, yet the literature falls short in exploring innovative solutions to these pandemic-specific issues.

Multiple authors identified the need for longitudinal studies to understand the full extent of the pandemic's effects on nurses' mental well-being (Desroches et al.,

2022; Hammond et al., 2021; Slykerman et al., 2022; Yarad et al., 2022). Nearly half of the respondents (44%) in a 2022 study by Yarad et al. (2022) exhibited early symptoms of burnout, reporting problematic experiences at work. The need for more support was emphasised in almost every paper, with calls for urgent mitigation before the burn out problem became excessive (Haar & Mowat, 2022; Leaf & Murray, 2022). While the literature acknowledges the inadequacy of current healthcare systems in supporting their workers (Hamama et al., 2022), it fails to provide comprehensive examinations of how organizations can restructure to better support their nursing staff.

5.5.4 Theme 4: Coping, resilience, satisfaction

Nurses' coping, resilience, and satisfaction during the Covid-19 pandemic was influenced by psychological adaptations, professional values, educational approaches, and organizational support. An interesting finding across multiple Israeli studies was the adoption of military metaphors and "war terminology" by nurses working on Covid-19 wards (Dopelt et al., 2021; Gendler et al., 2022; Green et al., 2022; Marey-Sarwan et al., 2022). The use of this terminology suggests the adoption of a wartime coping mechanisms, potentially serving as a way to mentally prepare for and navigate the intense challenges of the pandemic. However, the long-term implications of this militaristic mindset on nurses' mental health and professional identity are a concern and warrants further investigation. Interestingly, the concept of "professional joy" emerged as a significant resilience tool in New Zealand, with researchers recommending the implementation of a "cycle of joy" for essential staff (Leaf & Murray, 2022). This positive psychology contrasts with the more combative war metaphors, suggesting that different cultural contexts may influence the framing and experience of resilience during crises.

The pandemic also highlighted the importance of educational frameworks in fostering resilience among nursing students. Studies in Israel recommended maintaining stable educational structures to lower anxiety (Savitsky et al., 2020) and incorporating resilience skills into the nursing curriculums (Savitsky et al., 2021; Drach-Zahavy et al., 2022). In New Zealand, the active participation of nursing

students in the pandemic response had a positive effect enhancing their sense of usefulness and accomplishment (Jagroop-Dearing et al., 2022). Suggesting that a balance between structured support and meaningful engagement in crisis response may be an important consideration in the development of resilience in future nursing professionals.

While some studies reported on nurses' satisfaction and motivation to join the global pandemic battle (Melnikov et al., 2022), others highlighted an acute need for appropriate support systems, including psychological support and better training in coping mechanisms (Green et al., 2022a; 2022b). Interestingly, contrary to some findings, working on a Covid-19 ward was not always associated with increased burnout levels (Kagan et al., 2022; Milgrom et al., 2020). The discrepancy may be explained by differences in patient outcomes between general Covid-19 wards and ICUs, underscoring the importance of context-specific analyses of nurse well-being.

The persistence of core professional values during the pandemic also emerged as important. Sperling (2021a) found that even amidst the crisis, nurses continued to prioritize "worthwhile accomplishments," professional challenges, and independence in their practice. This resilience of professional values suggests that maintaining a sense of purpose and autonomy may be crucial for nurse satisfaction and retention during prolonged crises.

Further investigation is needed to see if health care organisations are taking note of research that has been published and if the suggested initiatives are implemented. For example, Goldfarb et al. (2021) argued for the need for proactive emotional support for nurses. This study was done in collaboration with Dr. Shoshy Goldberg, the chief nurse of Israel, who had the capability to implement the advice. Savitsky et al. (2020) recommended lowering student's anxiety in Israel by maintaining a stable educational framework. One year later the incorporation of resilience skills into curriculum was seen as a positive tool for stressed nursing students (Savitsky et al., 2021), with this finding was supported by Drach-Zahavy et al. (2022). In NZ Thompson et al. (2022a) explored how junior nurses navigated the blended learning system and found that there was a need to acknowledge the

emotional, physical, and intellectual toll the pandemic took on nurses and nursing students.

5.5.5 Theme 5: Ethical and moral questions

A conflict between duty of care and risk of infection created moral and ethical dilemmas for health care workers, as supported by surveys conducted by Sperling (2021a, 2021b, 2022), Savitsky et al. (2021) and Melnikov et al. (2022). Questions on personal safety, allocation of scarce resources while trying to provide safe, quality care, were balanced by nurses' feeling of professional responsibility and moral duty to assist those in need. As per Sperling's survey (2021a) conducted at the beginning of the pandemic: "While 40% nurses were scared to care for Covid-19 patients, 74% did not believe they had the right to refuse to treat certain patients" (Sperling, 2021a, p.1). This is a high percentage, however it also indicated that 26% of nurses felt they could refuse to treat a patient to protect themselves. A survey of 231 nurses in 2021 found they did not hold an "utilitarian approach to resources allocation" (Sperling, 2021b, p.3) and acknowledged the value of all patients and their right to proper care.

In both New Zealand (Thompson et al., 2021) and Israel (Melnikov et al., 2022) nurses reported being feared and cut off from society for working in hospitals during pandemic. Cook et al. (2021) and Crowther et al. (2021) interviewed NZ nurses struggling with duty of care and responsibility for themselves and their family's safety. HaGani et al. (2022) questioned 148 Israeli nurses in quarantine due to infection from Covid-19 patients, examining the psychosocial impact of separation from family, guilt at being unable to work, second-guessing over their use of PPE and public shaming, on their wellbeing. The study recommended mental health support after return to work.

5.5.6 Country specific themes

5.5.6.1 Covid ward and vaccination in Israel

New Zealand did not experience an influx of Covid-19 positive patients and as such had no need to convert whole departments into Covid-19 dedicated areas. Israel had one of the highest Covid-19 positive numbers per capita in 2020-2021 (Worldometer, 2023) and Covid-19 wards are prominent in research findings on the

response of nurses to the pandemic (Milgrom et al., 2020; Dopelt et al., 2021; Savitsky et al., 2021; Sperling, 2021; Mosheva et al., 2021; Green et al., 2022b; Kagan et al., 2022).

Challenges in Covid-19 ward work, such as communication difficulties due to use of personal protection equipment (Green, et al., 2022b) and increased numbers of death (Gendler, et al., 2022) did not bring higher levels of burnout as reported by Kagan et al. (2022) and Milgrom et al. (2020). However, a survey by Mosheva et al. (2021) of 828 health care workers reported that “witnessing patient death at Covid-19 wards was associated with a four-fold increased likelihood of Post Traumatic Stress Disorder (PTSD) compared with the non-Covid-19 wards” (p.8). Dopelt et al., (2021) reported on coping mechanisms across Covid-19 wards, the use of words describing a sense of going to war to defend their homeland, a battlefield that required a sacrifice: “The system functioned well. Like in a war... Like soldiers preparing for battle, the interviewees felt they were unable to refuse joining the coronavirus ward as staff, despite the inherent risks.” (p. 6).

A second unique theme for Israel was the impact of vaccinations. The country was seen as a Pfizer laboratory (Rosen et al., 2021) and health care workers participated in testing during early vaccination (Amit et al., 2021; Haas et al., 2021; Regev-Yochay et al., 2021; Shitrit et al., 2021b). There is no mention of the ethical issues in these studies, it almost seems as though health care workers were expected by default to participate.

Vaccine hesitancy in healthcare workers was researched by Rosen et al. (2021). It is important to note that unvaccinated health care workers were able to continue working in Israel during the vaccination mandate. Knowledge and attitudes towards Covid-19 vaccination among health care workers was surveyed by Zaitoon et al. (2022), with a negative attitude towards vaccination observed especially among nurses, paramedics, and young employees. Since health care workers do influence the public, the authors saw a need for intervention, to increase the vaccination of health care workers and enhance the acceptance of vaccination in the general population. Israel – like many other countries – experienced a major increase in Covid-19

infections with the UK variant (December 2020) and as such the vaccination campaign was launched at a very challenging time for the Israeli health care system.

Interestingly, the question of minority nurses, such as Muslims, Christians, Druze, and Bedouins, is missing from discussions in the Israeli academic literature during the pandemic. One paper discussed the ‘*Underground Covid-19 home hospitals for Haredim [ultra-orthodox Jews]: Non-compliance or a culturally adapted alternative to public hospitalisation*’ (Gabay & Tarabeih, 2021), and mentions ultra-orthodox Jewish doctors and nurses providing care for Haredim, a religious community whose members were advised by rabbis not to report to hospitals. Jewish traditions and laws require the family to be directly involved in care of the sick. The study cited one of the Covid-19 patients, reflecting on his experience in a public hospital: “A disaster! Dying with no farewell and without prayers for the dead...I want to die according to the rabbinic laws, not the laws of the state.” (Gabay & Tarabeih, 2021, p. 3444). The underground hospitals started after the first wave of Covid-19, where the ultra-orthodox community was over-represented in positive cases as well as in death statistics. The reason cited was that the hospitals became places, where ‘human care’ was missing, due to staff being in PPE and the limitations on visitors

5.5.6.2 *The question of Māori and Pasifika and leadership in NZ*

In New Zealand, studies examined the role of nurses during the time of crisis. Personal growth and leadership of nurses was the main subject of five studies in NZ (Hughes, 2020; Cook et al., 2021; Clarke et al., 2021; Davis et al., Thompson et al., 2022). Given that many managers were physically absent, nurses were forced to step up as leaders and fend for themselves, as discussed by Cook et al. (2021) and Hughes (2020). Clark et al. (2021) reflected on the unique leadership among Indigenous nurses in Canada, US, NZ and Australia. These health care workers took upon themselves the responsibility for their communities, shared information, provided comfort, and put order into the pandemic chaos

Māori nurses used their personal knowledge of underprivileged communities (Clark et al., 2021) to educate them about the necessary precautions, testing, and

masking. Asian heritage nurses experienced unique challenges during the pandemic. Fifty-one nurses completed a survey, with 47.06% reporting negative experiences, racial discrimination, bullying and judgement (Song & McDonald, 2021). The writer concluded that “ethnic minority nurses are key assets to the New Zealand health system. It is important to understand their experiences and challenges, particularly during the Covid-19 pandemic to make sure they are supported and protected from any physical and emotional injury” (p.6).

5.6 Discussion

This literature review aimed to examine the experiences of nurses working during the Covid-19 pandemic in Israel and New Zealand, focusing on the support they received to prevent burnout, stress, and compassion fatigue. Five key themes emerged that characterize nurses' experiences and the support mechanisms in place during this critical period, providing valuable insights for future crisis preparedness and nurse support systems. These included knowledge as a tool; policy adjustments to crisis; psychological impact; coping resilience, satisfaction; and ethical and moral questions.

One of the most prominent themes was the crucial role of knowledge as a tool for mitigating fear and uncertainty among nurses. Access to accurate and up-to-date information was found to be essential in helping nurses navigate the rapidly evolving pandemic landscape (Dubovi et al., 2022; Savitsky et al., 2021). However, this finding is subject to the explosion of information, particularly on social media platforms with the potential to overwhelm if not managed. So, while social media can serve as a vital resource, it can also lead to information overload and the spread of misinformation, potentially exacerbating stress and confusion among healthcare workers. The double-edged nature of information the flood of information during the crisis needs to be considered as to how and if it can be managed, balanced or critiqued without the risk of undue governmental control of the narrative which in turn can also be detrimental. Strategies and initiatives that foster credible and safe information environments need further research. Retaining professional autonomy in decision making via health care

workers education and skills that foster critical analysis and reasoning in the information era may be one avenue for investigation.

The significance and speed with which changes to policy adjustments and directives emerged during the crisis were also identified as a challenge. Nurses faced difficulties due to inconsistent training, lack of clear protocols and guidelines, and poor communication of policy directives from management (Goldfarb et al., 2021; Melnikov et al., 2022). The gap in the clear implementation of crisis management systems within healthcare communication also demonstrates the need for more adaptive and responsive policy frameworks. Initiatives such as the recommendations for the appointment of a pandemic coordinator to provide information and support (Melnikov et al., 2022) was one potential solution to improve communication and policy implementation during future crises that emerged from the literature. However, the problem is complex and likely to require a multifaceted approach and currently there was little other evidence on how this might be achieved in the literature.

The complex interplay of factors influencing nurses' well-being was evident in the discrepancies in reported levels of burnout and stress among nurses (Kagan et al., 2022; Milgrom et al., 2020). The needs and responses of nurses varied across acute and long-term settings, and the vulnerability of the patients in the nurse's care. There was a perceived gap in the recognition of the acknowledgement of this by institutions. The differences in the susceptibility and vulnerability of the different health care settings indicates the need comprehensive and tailored support systems that address the multifaceted nature of care settings be carefully planned and implemented earlier within the crisis management systems. Despite the challenges, the review did also revealed remarkable resilience and dedication among nurses working within these settings. Some nurses demonstrated a strong sense of professional responsibility, moral duty and the expression of "professional joy, even in the face of significant personal risk (Green et al., 2022a).

The importance of cultural considerations also emerged. The experiences of Māori and Pasifika nurses highlighted the value of leveraging community-specific knowledge and cultural competence in public health initiatives (Clark et al., 2021).

However, the principle of self-determination was not fully implemented during the vaccination drive (Davis et al., 2021), revealing a disconnect between recognizing diverse nursing perspectives and integrating them into healthcare decision-making processes. The linguistic framing of war like terminology by Israeli nurses on Covid-wards also provides insights into the coping strategies of this specific group. The intricacies of these cultural differences and the long-term consequences need more exploration in future studies as this will provide insight into how individual countries should look to tailor their crisis response and initiatives.

The findings from the review have significant implications for preparedness in future crises and highlight critical areas where nurses can be better supported. Firstly, healthcare systems must prioritize the development of robust, flexible information management systems that can rapidly disseminate accurate, up-to-date information while mitigating the risks of misinformation and information overload. This could involve the creation of centralized, verified information hubs and training programs to enhance nurses' digital literacy and critical information evaluation skills. Secondly, clear, adaptable crisis response protocols that can be quickly activated and effectively communicated across all levels of healthcare organizations are essential. The appointment of dedicated crisis coordinators could be one way to facilitate this process. Thirdly, enhanced ethical decision-making support and clear guidelines on balancing professional responsibilities with personal safety are needed to address the ethical and moral dilemmas faced by nurses during crises. Furthermore, comprehensive, ongoing mental health support systems for nurses, including readily accessible counselling and resilience training programs integrated into nursing education and professional development, could be established within curriculum. Lastly, culturally competent crisis response strategies that leverage diverse nursing perspectives and community-specific knowledge are important for effective and equitable healthcare delivery during crises.

While this review provides valuable insights, it also reveals several limitations and areas for future research. Most studies included were cross-sectional, providing snapshots of nurses' experiences at specific time points limiting our understanding of the longer-term implications. Longitudinal studies designed to track changes in

nurses' experiences and well-being over time would provide more insights. Additionally, the review relied heavily on survey data, with limited in-depth qualitative studies. More qualitative research is needed to capture the nuanced, lived experiences of nurses. The focus on two countries, while providing valuable comparative insights, also suggests the need for broader cross-country comparisons to understand the influence of different cultural contexts on nurses' experiences. Finally, there is a clear need for research that evaluates the implementation and effectiveness of specific support strategies for nurses, such as resilience training programs or organizational interventions. The search strategy did not include handsearching and there is a high risk that not all relevant literature will have been captured during what has been an unprecedented and evolving field of investigation and literature publication. Nevertheless, the studies that are included provide valuable insights that should help inform policy and health system initiatives to support nurses.

In conclusion, this literature review provides valuable insights into the experiences of nurses during the Covid-19 pandemic in Israel and New Zealand, highlighting both the challenges faced and the resilience demonstrated. The findings, however, indicate the need for more comprehensive and sustained support systems for nurses during crises. It also highlighted the lack of qualitative studies that have specifically focussed on the lived experience of nurses during the crisis indicating the need for more nuanced qualitative studies on how nurses can be better supported if future initiatives are to be effective. Moving forward, it is crucial that healthcare organizations, policymakers, and researchers work collaboratively to develop and implement informed evidence-based strategies to support nurses. This includes improving information management systems, enhancing policy communication, providing comprehensive well-being support, integrating diverse nursing perspectives and need as identified from lived experience into decision-making processes.

Chapter Six: Social Construction

In this chapter I discuss my findings from the online newspaper coverage and social media, especially Twitter. To answer my research question: **‘What are the experiences of nurses working during the Covid-19 pandemic, and how were they supported?’** I needed to ‘understand’ the development of the pandemic narrative, which was constantly changing and contradictory, with governments at the local level, and WHO at the global level, attempting to control the information. Banning and censorship was significant, individuals were blocked on social media, refused publication and in some cases had their practicing licences cancelled (Kheriaty, 2022; Prasad & Ioannidis, 2022; Prasad, 2023).

Nurses worked within this narrative, they witnessed the situation on the ground, were influenced by the information received from their employing organizations, but also from colleagues, the wider community, and social media. Given this, the chapter provides a brief overview of the conflicting and contradictory discourse of the Covid-19 pandemic, along with the silencing of views contrary to official WHO or government positions. In the first section I provide an overview of how the pandemic was presented and some of the contradictions that emerged. Drawing on a thematic analysis I next examine the development of the pandemic narrative, as seen from online news articles reporting from and about Israel and New Zealand, and compare the views and ideas raised. I next draw on events that occurred within social media, namely Twitter. This allows me to raise issues such as Fact Checking, and Misinformation and to bring the discussion up to the present time, by noting the current work being done by WHO in its review of Covid-19. To highlight the contradictions, I draw on two major issues: vaccinations and mask wearing. In the conclusion I link my findings to my research question by asking where was the support for nurses? Prior to each section I briefly remind the reader of the search strategy used to access this data.

6.1 Some contradictions in the pandemic narrative

At the beginning of 2020 information on the Wuhan strain was available on Facebook, YouTube, Twitter, and TikTok as well as broadcasted on official media. As per findings in Chapter Two, research surveys of nurses and health care workers indicated that they searched for information on social media, both to allay their own fears, but also in response to ambiguous and contradictory directives from their workplace (Dopelt et al., 2022; Savitsky et al., 2021; Cook et al., 2021). The world of e-information can be overwhelming and confusing. The call for normal discussions, sharing of data, as well as monitoring and censoring incorrect information, was ever present (Patel et al., 2020).

Pictures of health care workers clad in protective equipments, photos of exhausted health staff, reports of overcrowded hospitals, clips of nurses dancing, never ending data explaining epidemiological terminology, all shaped public opinion. Official coverage of statistics, with arguments about the validity of data collections, debates over whether people were dying from Covid-19 or with Covid-19, were overwhelming. In March 2020, Dr Cameron Kyle-Sidell questioned the protocols for ventilating patients in New York hospital' ICU. His video disappeared from YouTube within hours of its publication (Hollander, 2021; Kyle-Sidell, 2020). However, his questions were proven valid when studies started to link a secondary bacterial pneumonia in ventilated patient to the ventilators themselves and the high numbers of mortality (Gao et al., 2023; Senger, 2023).

On March 3, 2020, the director general of WHO announced, "Globally, about 3.4% of reported Covid-19 cases have died. By comparison, seasonal flu generally kills far fewer than 1% of those infected" (WHO, 2020). In March 2020 South Korea had administered more Covid-19 tests than any other nation, and summarized the findings as, "The estimated population-level death rate (deaths per 100 000 person-years) increased with age: 0.0 among 0 to 9 year olds, 0.1 among 40 to 49 year olds, and 14.5 among ≥ 80 year old" (Soneji et al., 2021). Statistics from the Diamond Princess cruise ship in February 2020 showed similar results: "Our most recent estimate of the effective reproduction number of the ongoing Covid-19 epidemic on

board the Diamond Princess ship was largely below the epidemic threshold of 1.0” (Mizumoto & Chowell, 2020, p. 6). Similarly, a paper by Ioannidis (2020) concluded the mortality of Covid-19 is nowhere near the predictions from the Imperial College paper (Adam, 2020), the model used for the pandemic approach worldwide. The question in 2020 was: “why are we still in panic about this virus”? (Magness, 2021, p. 1).

In Santa Clara County Drs. Dan Erickson and Artin Massihi questioned the official statistics of the pandemic, based on what they saw, while working in the hospitals ER. Their YouTube video disappeared within 3 days, after 5.46 million views (Wright, 2020). To investigate their claim a study on ‘Antibody Seroprevalence in Santa Clara County’ was done, supporting the two doctors’ observations (Bendavid et al., 2020). Infection fatality ratio was established between 0.12% and 0.2%. This study from spring 2020, published online without peer review, was highly criticized, for example by Professor Siouxsie Wiles from Auckland University (Wiles, 2020). One of the problems with the study she saw was in the recruitment of the participants by advertising in schools to get PCR tests (Lee, 2020). In 2021 the study was peer reviewed and published (Bendavid et al., 2021). Later more studies supported the Santa Clara findings on Covid-19 infection fatality ratios being age specific, with an average IFR of 0.17% (Alexander, 2022; Gu & Cao, 2022; Ioannidis, 2021; Ioannidis et al., 2022; Levitt et al., 2022).

As public health experts Annas and Galea (2021) argued, using the worst-case scenarios and models for pandemic planning is not the best approach. One tends to agree with the Swedish chief epidemiologist, Anders Tegnell, “quantilla omni mundus regatur” [“with how little wisdom the world is governed”] (Anderbert, 2022, para 3). In 2023, in hindsight, it is clear the Swedish policy of keeping schools open, refusing to lockdown and to mandate masks, and trusting citizens, was more beneficial than the more authoritative approach of the rest of the world. Based on the Imperial College model (Fergusson et al., 2020), Sweden should have had 85-96,000 deaths without lockdowns (Giesecke, 2020; Kulldorff, 2022). Up to January 2023 the total Covid-19 death toll was approximately 24,000, most of the deaths were over 80 years old (Worldometer, 2023d), while life expectancy in Sweden is 83 years. The excess

death in Sweden did not increase during the pandemic years (Figure 6-1). Annas & Galea (2021) concluded: “Public health has a role to play in presenting an approach that will increase the public’s support of, and trust in, the public health enterprise...health is a means to an end, requires cooperation not coercion and that approaches to mitigation balance real humans on multiple axes, including the need to be safe from the virus, the need to earn a living, and the need to be with loved ones who are sick” (p. 13).

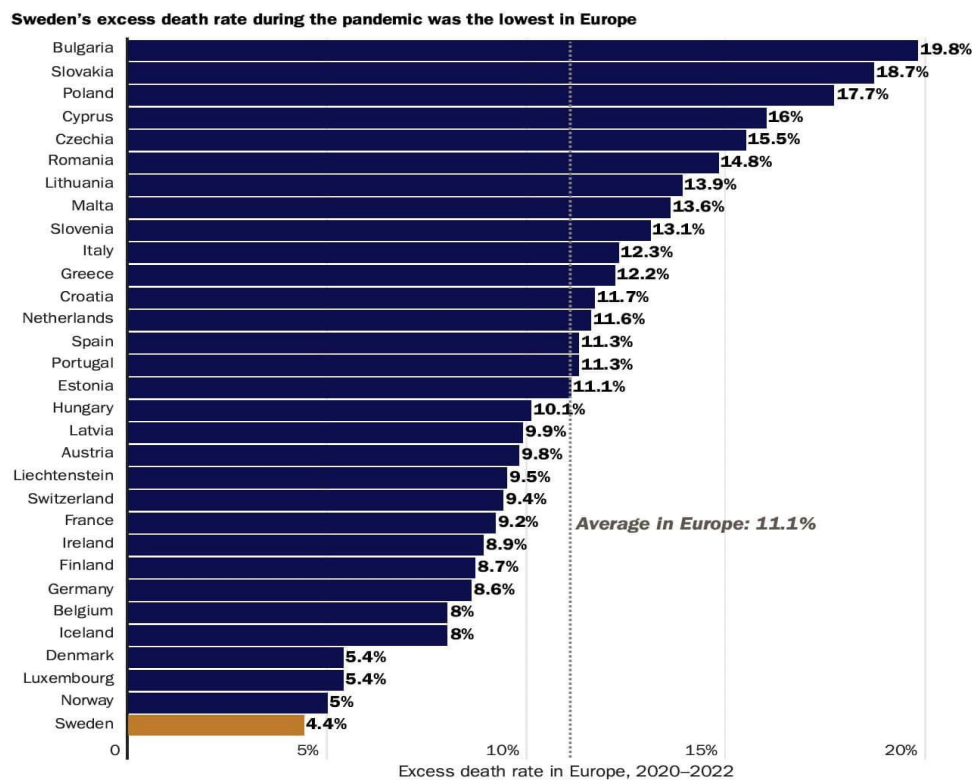


Figure 6-1: Excess death rate in Europe

6.2 E-News and the pandemic

Newspapers are crucial for informing citizens in times of health crisis, such as during global pandemics (Ghasiya and Okamura, 2021). To see how e-news supported the official narrative, and impacted on public responses, I analysed the sentiment of reports from the two countries, New Zealand and Israel. A search was

done on Google of online news articles. These were examined via NVIVO. Figure 6-2 is a word cloud illustrating the major ideas.



Figure 6-2: NVIVO word cloud of online news in IL and NZ

6.2.1 Search strategy for E-news

To investigate my research question, I looked for support tools that were available to nurses. I searched in newspaper articles on how to assist health care workers with burnout, stress and depression. The keywords used in the initial search were:

Country (New Zealand OR Israel) + Covid-19 + nurse

Type of material specified: news.

For Israel the search retrieved 12 million articles, for New Zealand 10 million. The numbers fluctuated, and the final search was completed on January 1, 2023. The custom range was done separately for each year of the pandemic, 2020, 2021, 2022.

Articles were retrieved until themes were saturated, a method described by Bryant and Charmaz (2007) as “The point at which gathering more data about a theoretical construct reveals no new properties, nor yields any further theoretical insights about the emerging grounded theory” (p. 611). As per Sandelowski (1995), theoretical saturation is rooted in an iterative process of parallel sampling, collecting, and analysing data. The data gathering stops when, “Seeing nothing new in newly sampled units or feeling comfortable that a theoretical category has been saturated are functions involving the recognition of what is there and what can be made out of the data already collected, and then deciding whether it is sufficient to create an intended product” (p. 180).

Data collected from online newspaper articles for each country, Israel and New Zealand, were analysed separately, and then similarities and differences summarized. Most articles have descriptive and often dramatic titles; reports are often accompanied by pictures of health care staff fully dressed in protective gear. Statistics played a large role in the news over the three years of the pandemic, e.g., the number of positive cases, hospitalized patients, ICU bed occupation, vaccination rates, and the percentage of non-vaccinated in the population. Death numbers were prominent, the R-naught (R_0) value was discussed as well. (Dodsworth, 2021). Appendix 2, Tables 1-6 provide a summary of the retrieved articles.

The themes were divided according the three years of the pandemic. In 2020 major themes common in both countries were the crisis in nursing homes, which were struggling with impact of the virus on the elderly: the capacity of health care systems to cope with the influx of patients, and staff shortages. The second phase of the pandemic was the year of the vaccine, where the vaccination drive in Israel, accompanied by never ending statistics and vaccination advertisement, were prominent. By 2022 the volume of articles retrieved from Israel declined. reflecting less interest in Covid-19 (possibly due to a focus on regional challenges), however, with the cancellation of the zero policy and opening the border, interest in the virus increased in New Zealand, along with infections. This shift in the proportion of papers focusing on Covid-19 over the three years across the two countries is seen in (Figure 6-3). In presenting the themes, in line with my thesis aims, I have concentrated on a

brief overview and then the two major themes of staff shortages and support/tools provided for nurses during the pandemic.

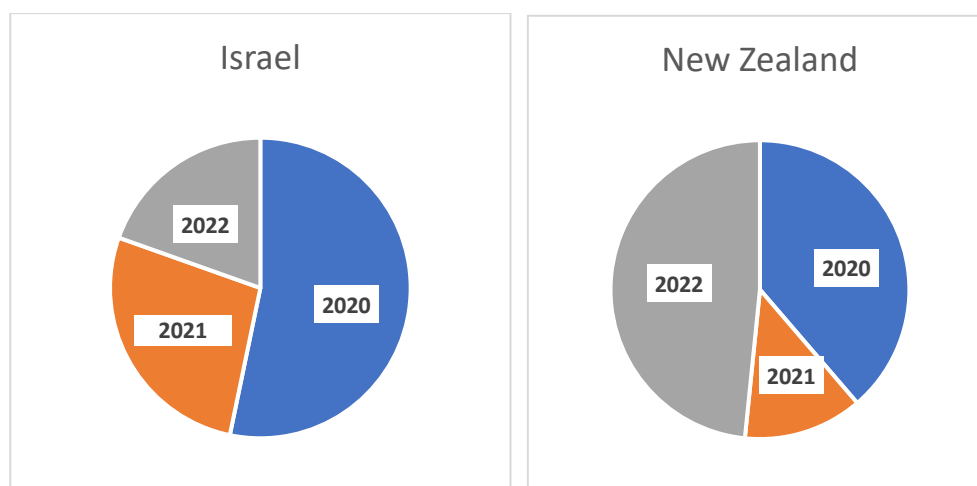


Figure 6-3: Proportion of articles during three pandemic years

6.2.1.1 How the pandemic was painted by the E- news media

Initially the E-media painted a picture of heroic nurses fighting the invisible virus as well as being in danger themselves from inadequate personal protection. This theme is directly linked to the topic of staff shortages, widely reported in both countries. The starting year of the pandemic brought heart-breaking stories, “*Coronavirus: Israeli hospital allows families to say goodbye*” (Tercatin, 2020) as well as uplifting reports of unity: “*Israeli Arab doctors and nurses help Orthodox Jewish patients with religious practice in midst of Coronavirus crisis*” (Tercatin, 2020). Even without high numbers of Covid-19 positive patients, the situation was not easy: “*A New Zealand healthcare worker describes the unique stress of waiting for waves of coronavirus cases to hit when so far they haven’t*” (Pasley, 2020). Transmission dominated Covid-19 news in 2020 in New Zealand, with reporting of individual cases, such as “*Nurse case shuts down Queenstown hospital*” (Houlahan, 2020). In contrast in Israel, due to the volume of Covid-19 positive cases, even though “*Virus outbreak found at Tel Aviv hospital*” (2020), the hospitals kept operating

throughout the pandemic and individual cases were not reported, unless of prominent figures.

After floods of reports on successful vaccinations, such as *“How Israel got vaccines to 9% of its population in less than 2 weeks”* (Neilson, 2020), the headlines reflected the tiredness with the pandemic: *“Israel hoped to vaccinate 750,000 toddlers against Covid-19. Few have heeded the call”* (Efrati, 2022); *“Israeli doctor accuses health authorities of exaggerating fear of omicron variant”* (Ankara, 2022). NZ media reports of a case of a nurse dismissed from her work due to an anti-vaccination post on social media made headlines, *“Nurses’ dismissal for anti-vax social media posts ‘justified’* (Fuller, 2022). The different approach towards vaccination mandates between the two countries is noticeable, *“Why Israel could force Covid-19 vaccination, but won’t”* (Jaffe-Hoffman, 2021) while NZ faced the dilemma of not allowing unvaccinated health care workers to work: *“‘Take one for the team’: Unvaxxed nurses urged to get jab to return to work”* (Tilo, 2022); *“Nurses who can’t get boosted after contracting Covid-19, stood down”* (Miller, 2022).

6.2.1.2 Staff shortage during the pandemic

The most important topic for both countries throughout the pandemic was staff shortages in hospitals. New Zealand depends on an international nursing force and the closure of borders stretched already exhausted nursing staff, leading to overwork and headlines such as *“Thousands of nurses go on strike in New Zealand”* (Reuters, 2021b). Israel faced similar problems, with strikes being reported every year of the pandemic, following headlines promising improvement in the situation, such as *“Israel seeks to ease immigration for doctors, nurses due to manpower shortage”* (2021); *“Health Ministry fast-tracks licensing for 900 nurses amid pandemic”* (2020).

The involvement of the Army in meeting the shortage of health care workers is mentioned in both countries, *“IDF teams to provide care for Covid-19 patients treated at home”* (2021); *“Gantz orders IDF to build field hospital for virus cases as hospitals fill up”* (Boxerman, 2020) and *“New Zealand Defense Force assistance around Covid-19”* (Force, 2020); *“Army on the frontline”* (Army, 2022).

A few feel-good stories, such as an account of a nurse who cared for Boris Johnson, Prime Minister of Britain, and was praised by Jacinda Ardern, featured in an encouraging articles about hope: “*Nurse Jenny says it’s ‘therapeutic’ to be back in NZ*” (Kelly, 2022). Israeli specifics, such as “*Secret ultra-Orthodox program treating thousands of Covid-19 patients at home*” (Bachner, 2020) and everyday reality of multicultural hospitals, such as “*Jewish and Arab health professionals unite in solidarity*” (Schiller, 2021) illustrated the cooperation of professionals from different religious, ethnical and cultural backgrounds, united in caring for a patient, a human being.

6.2.1.3 *Tools for stressed nurses during the pandemic*

Stress, anxiety, and burnout were reported from both countries. In NZ “*MIQ nurses speak out: We’re going to get sloppy...we’re tired and stressed*” (Gregan, 2021), discussed the reality of MIQ hotels, nurses reporting inadequate care for stressed travellers, many closed in mandatory two weeks isolation after flying to NZ to see sick and dying relatives. The situations in the Israeli hospitals, where “*Medical professionals feel burnout, alone during coronavirus crisis*” (2020) is mirrored one year later in NZ, with “*Covid-19 tsunami coming: Emergency nurse says lack of planning causing anxiety*” (Quinn, 2021). The reality of being surrounded by the pandemic in and out of hospital is discussed in an article from Israel, “*Amid Covid-19 frontline medical workers take their trauma home*” (Jaffe-Hoffman, 2021), emphasising there was no possibility to take a mental break from the ever-present virus.

My question, what tools were available in the hospitals for the nurses to assist them with burnout and stress, was not answered by the media search, although there is evidence that the hospitals and health care systems were given assistance in both countries, such as “*Israeli healthcare technologies reduce pressure on global healthcare systems*” (Global, 2020) or “*Coronavirus: Only one call away – at the other end of New Zealand’s Covid-19 hotline*” (Williams, 2020). Despite this, assistance for nursing staff was limited to; “*Hospital to allow staff to park for free after nurse forced to pay \$19*” (2020) and official appreciation, “*Israel dedicates Independence Day flyover to nation’s hospitals*” (Alster, 2020). Concrete tools to

assist with stress are not mentioned. This issue will be discussed in more details in further chapters.

6.3 The pandemic and the world of Twitter

“We went through lockdown by stealth: Policies that aim to keep people physically distant from one another by force or fear. Mass asymptomatic testing & quarantines, Vaccine-based segregation. Mask guidance that induces people to treat others as biohazards. Panic-mongering of media” (Bhattacharya, 2022 [Tweet]).

Fear is directly related to the bio-policy of the state, as mentioned in Dr Bhattacharya’s Tweet, summing up the last three years. Twitter played an important role in the development of the Covid-19 narrative (Lwin et al., 2020; Clemente-Suarez et al., 2022). In this section I trace this progression by zooming into social media, namely Twitter starting first with an outline of my search strategy.

6.3.1 Twitter search strategy

Twitter analysis can be done through hashtag searches, as already mentioned. There are several supports to this approach, for example, the academic literature provides information on the changes in volume, topics and hashtags over the pandemic period (Alhazmi, 2022; Chen et al., 2020; Jafarzadeh et al., 2021). Software programs are evaluating word clouds on Twitter (See Figure 6-4) analysing the mood of posts, examining retweeting statistics, and calculating the impact of different Tweets (Boon-itt & Skunkan, 2020). For example, Global sentiment rapidly changed due to Covid-19 pandemic, as illustrated by findings in a study by Lwin et al. (2020). Social isolation, fear, anger, and sadness were presented in analysis of Tweets from 170 countries during the first three months of 2020. A study by Kausar et al. (2021) found a shift in emotions towards positive sentiment, indicating people become habitual to Covid-19 and the recovery rate gave a reason for optimism.



Figure 6-4: Top trending words over Twitter

I used a snowballing approach to follow the pandemic on Twitter. I started by retrieving trending Tweets related to my research. Following the re-Tweets and comments on the pandemic approach, I snowballed into discussions with links to pre-printed articles, statistics and interviews with epidemiologists, doctors from various specialities around the globe, health care staff talking about their experiences in the field and zoom meetings on various topics. My purpose was to follow the debate on Twitter to see if my topic of interest, ‘support tools for health care workers’, was present in discussions as well as to monitor the development of pandemic sentiment. As will become obvious, discussions on support for healthcare workers did not occur, what did occur was serial debates leading to confusion; a state of affair I took to be counterproductive for nurses.

As mentioned, I did not undertake a computer analysis of Tweets as such, even though I received permission from Twitter to use their API research application for data evaluation. Instead, I chose a method of topic-based sampling, which is built on predefined lists of user accounts as a starting point, and is extended through snowballing, choosing which accounts would appear in my feed, as described by Gerlitz and Rieder (2013). There are some limitations to this approach. An account

owner sees their followers and can block them. During the Covid-19 pandemic, social media became a world of blocking, censoring, and propaganda, all challenges to free speech and democracy. As outlined in a 'Letter of the Israeli PECC (Emergency Council for Covid-19 Crisis)' from July 24, 2022: "The discourse on social networks is often a harsh discourse, a discourse that some occasionally define as a violent discourse. And yet, this discourse is also very important as part of freedom of expression and part of being a democratic country that sees freedom of expression as a fundamental right of the utmost importance... A strong democracy must be able to handle this kind of discourse as well" (para 3). The official Twitter site of the NZ government 'Unite against Covid-19' provides the latest information on government recommendations, as per the Prime Minister, Ardern: "We will continue to be your single source of truth. We will provide information frequently. We will share everything we can" (Newsroom, 2020, para 1). I was blocked by the NZ government site (Figure 6-5). No reason was provided, meaning, there is no way I can redeem myself in case of a misunderstanding. Since PM Ardern said: "Remember that unless you hear it from us, it is not the truth" (Newsroom, 2020, para 2), I still have the option to search official MoH NZ web site. if I want to be informed about the latest truth about the virus.



Figure 6-5: NZ blocked my Twitter access

The Twitter world is international, with data being tweeted and retweeted globally, the only barrier being language, since the meaning of the original message could be lost due to incorrect artificial intelligence [AI] translation. While for e-news articles it was possible to separate out Israel from New Zealand, and to compare the two countries, this was not always possible for Twitter. As will also become clear, following different discussions was difficult given many eminent scientists were silenced, and directives from the two countries contradicted each other. The recent development regarding Twitter, with Elon Musk's purchase of the platform, opened a flood of information from previously shadow banned and cancelled accounts (Bhattacharya, 2022c; Tucker, 2022; Zweig, 2022). The information traffic is more open.

In Israel, The Israeli PECC (Emergency Council for Covid-19 Crisis) regularly tweeted and re-tweeted Covid-19 information in Hebrew and English. Links to Twitter discussions as well as statistics and data interpretation are provided by Shmuel Shapira, former Head of Israel Institute for Biological research, where a Covid-19 vaccine was being developed until Pfizer's contract with Israel stopped this study; Michael Levitt, Nobel laureate, Retsef Levi, professor at MIT, who is analysing Israeli data together with Josh Guetzkow, sociologist and criminologist lecturer at Hebrew University. For Israeli specific information the pages of journalist Barak Avi; Amir Shachar, head of ER Laniado hospital Israel; Avshalom Carmel, MD; Efrat Feningson, journalist; Rafael Zioni, MD; Yaffa Shir-Raz, journalist; Gal G., advocate.

For New Zealand a basic Twitter search "Covid-19 + New Zealand" led to discussions about Professor's John Gibson's papers on the economic effects of Covid-19 policies. Unfortunately, Professor Gibson has no Twitter page, so the discussions are without his input. The second interesting discussion was between Simon Thornley, an epidemiologist from Auckland University, who critiqued the Government's Covid-19 elimination strategy, and Michael Baker from University of Otago, who argued for the NZ 'go hard go early' approach based on mathematical modelling (Hendy et al., 2021). The trending hashtags for NZ during the first wave were "isolation, stay home, social distance, test, symptom, Jacinda Ardern" (Jafarzadeh et al., 2021, p.1). NZ doctors provide alternative views on evidence-based

medicine and zero Covid-19 policies at @NZDSOS (NZ Doctors Speaking Out with Science) as well as links to pre-printed articles and discussions. NZ Free News, NZ Initiative, @Coronavirus Plushie, @Hatchard Report, @Bronwyn, have links to articles relevant to NZ as well as discussion on government policies and the health care situation. The majority of accounts critical to official NZ policy are difficult to verify since individuals use pseudonyms. Their data, statistics, and observations are taken over and retweeted by verified users.

6.3.2 Twitter issues during the pandemic

Before the pandemic, Neubaum et al. (2014) argued that in a time of crisis social media serves as a platform for emotions and support sharing. Similarly, before Covid-19, Pershad et al. (2018) concluded that Twitter is the most popular form of social media used for health care communication, and Moorhead et al. (2013) saw social media as a powerful tool for collaboration between health care professionals globally. A study by Pershad et al. (2018) concluded: “Examining the current uses of Twitter in medicine has demonstrated that many doctors are using Twitter effectively to share information about research among their colleagues and collaborators and information about public health for the public” (p.114). An interesting data analysis of Tweets from health care workers in 2020 found “An increase in fear two weeks in advance of pandemic waves indicated that health care professionals are in a position, and with adequate qualifications, to anticipate pandemic development, and could serve as a bottom-up pathway for expressing morbidity and clinical situations to health agencies” (Elyashar et al., 2021, p. 7). Important pre-prints discussing Covid-19 treatments and statistics were waiting for peer review publication for months, which in the time of the pandemic, where immediate sharing of information and experiences was crucial, become problematic (Sharif et al., 2023). As such, social media became the platform for information sharing.

However, Chakraborty et al. (2020), after analysing Covid-19 Tweets in 2020, concluded there is a need for censoring and influencing information, “Without further delay, all governments should deploy Fact checkers in social media to prevent further sharing of information... researchers can think of incorporating emotional intelligence

so that the sentiments of the people can be further explored in a fruitful approach” (p. 12). In 2022, this need to check and suppress opposing information, was echoed by research on Twitter’s posts commenting on Covid-19 vaccination, finding “A growth in unfavourable opinion about both domestic and export vaccines all over the globe is concerning. Because health authorities want to improve the adoption of Covid-19 immunizations in order to stop the epidemic, they might use sites such as Twitter, to spread good messages and reduce negative ones” (Chinnasamy et al., 2022, p.13). The role of the social media in spreading messages, correct and incorrect, increased during the pandemic. The question, what to do about this ‘infodemic’, is currently being discussed by WHO, European Union parliament, US congress and others (WHO, 2023; EU Commissioner, 2022; Rose, 2023).

6.3.3 Fact checking

Early in the pandemic, the WHO started a program, ‘Call for Action: Managing the Infodemic’ asking to moderate information on social media (Tangcharoensathien et al., 2020). It was felt there was a need for a balance between combating disinformation and freedom of speech (Tan, 2022). National physicians’ organizations such as the American Medical Association called for disciplinary actions against colleagues propagating Covid-19 ‘misinformation’ or daring to question the official policy (AMA, 2022). A similar call was made by the FDA (Kadakia et al., 2023). Misinformation together with rumours, stigma, and conspiracy theories can have severe implications on public health (Islam et al., 2020). However, to find the balance between information and misinformation, is hard. WHO made it clear that no counter argument could be made that would go against its policy and guidance on the pandemic (Zorocostas, 2020).

Although this approach may be useful for controlling a pandemic, assuming there is only one single source of truth resulted in scientific debate being shut down overnight on official platforms (Kheriaty, 2022). For example, Professor John Ioannidis published on March 17, 2020, an opinion piece, ‘A fiasco in the making? As the coronavirus pandemic takes hold, we are making decisions without reliable data’, debating cost benefit analysis of the lockdowns, based on available data (Ioannidis,

2020). On March 24, 2020, Professor of economics, health research policy and medicine at Stanford University Jay Bhattacharya published an article in the Wall Street Journal ‘Is the coronavirus as deadly as they say?’ with similar conclusion. Both articles sparked comments on Twitter and led into shadow banning of both scientists (this topic will be discussed further on). Professor Martin Kulldorff, Harvard biostatistician and epidemiologist, was forced to publish his paper ‘Covid-19 counter measures should be age specific’ on April 10, 2020, in LinkedIn, since his study, also contradicting the official pandemic narrative, was not approved for publishing by any academic scientific journal (Kulldorff, 2020). Within days LinkedIn blocked Kulldorff from further publishing and deleted the original study (ibid).

The role of scientific research is to explore all options and to seek out evidence to support better care. Medical practitioners and scientists disputing the pandemic narrative were shut down in the media and in some cases lost their jobs and professional licenses (Kheriaty, 2022; Ponesse, 2022). This resulted in alternative social media platforms and emerging groups, where professionals could continue to explore the available evidence in a more clandestine way. These people were shunned internationally and labelled Covid-19 deniers and later anti-vaxxers (Horton, 2022). Professor Norman Fenton described in his paper ‘Censored by the academic preprint servers’ the difficulties he experienced from 2020 onwards with his pre-prints questioning the official narrative rejected (Fenton, 2023). Professor Vinay Prasad voiced similar problems in publishing his articles in this byline ‘Preprint servers have repeatedly censored our work on Covid-19 policy’ (Prasad, 2023). Epidemiology professor from Oxford University, Sandra Gupta, in her testimony for ‘UK Covid-19 inquiry’ concluded: “We need to question the role of both mainstream and social media, scientific journals and institutions in shutting down and censoring crucial debate” (Gupta, 2023, p.11).

The fact checking and cancelling of scientists, who went against the official Covid-19 line, is apparent from the ‘Great Barrington Declaration’ story. On October 4, 2020, Dr Jay Bhattacharya, Dr Sunetra Gupta and Dr Martin Kulldorf wrote the ‘Great Barrington Declaration’, calling for a strategy of focused protection, opening

schools for children, and balancing the damage of lockdowns against the known data on Covid-19 infection rates. The declaration was posted on social media, retweeted, and shared through online posts, with snowballing comments. However, it became problematic with a swift reaction from the White House: Dr. Collins, the director of the National Institutes of Health, sent an email to Dr. Fauci, the director of the National Institute of Allergy and Infectious Diseases. “This proposal from the three fringe epidemiologists . . . seems to be getting a lot of attention – and even a co-signature from Nobel laureate Michael Levitt at Stanford. There needs to be a quick and devastating published take down of its premises. Is it underway?” (Board, 2021, para 2), see Figure 6-6.

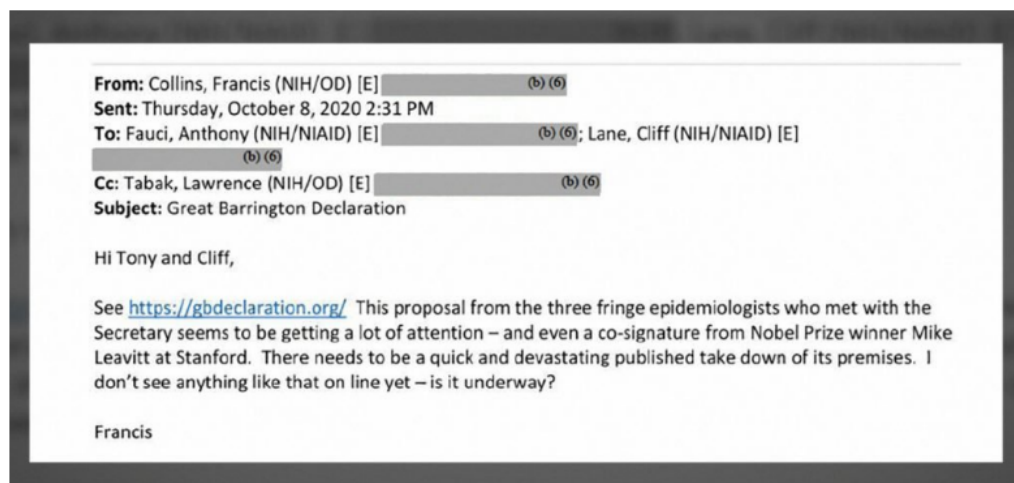


Figure 6-6: Fauci-Collins emails

This ‘take down’ was confirmed in 2022 in ‘Twitter files’ (Magness & Waugh, 2022). The ‘fringe epidemiologists’ from Harvard, Oxford and Stanford were shadow banned, meaning their posts became invisible on social media (Bhattacharya, 2022d).

Questioning the official information became an act of bravery or madness, leading not only to a ban on social media, but a loss of one’s job or even a license to practice. Nobel laureate Michael Levitt was scheduled to be the keynote speaker at the International Bio-Design Research Conference. He was uninvited for having signed ‘The Great Barrington Declaration’ and speaking out against the lockdowns (Simon,

2022). Jay Bhattacharya said in his Australian interview with John Anderson and Gigi Foster that he was glad to have tenure, since his job would be on the line (Bhattacharya & Foster, 2022). He and Martin Kullforf filled lawsuit against social media censorship. (Athrapully, 2022).

6.3.3.1 Information/misinformation/disinformation

While the pro-lockdown and pro-mask information were readily available, the alternative data was not (Prasad & Ioannidis, 2022). During the three years of the pandemic, lockdowns, masks, vaccination questions, vaccination mandates and vaccination injuries became strong points of argument, where the official story differed from the underground data. An example follows below.

For three years Professor Michael Levitt advocated for calculations of the Covid-19 virus effect in terms of the burden of loss of years, rather than loss of lives. He especially emphasised the importance of open schools, based on data available from Sweden, where no increase in the deaths of children or teachers were reported, despite schools remaining open during the pandemic (Hallin et al., 2022; Ludvigsson et al., 2021; Tegnell, 2021). Levitt's statistics and reasoning were shadow banned. Under the new Twitter owner, he was finally able to retweet his ironic post from January 2022: "Everyone knows that a life is a life. The death of 5 years old is equivalent to the death of 85-year-old" (Figure 6-7).



Figure 6-7: Michael Levitt's Tweet about data publishing

This is a direct echoing of his criticism of lockdown policies, since from 2020 he called for children not to be sacrificed in the name of saving the lives of their grandparents. As Dodsworth (2021) argued, a society should protect, not give up, the next generations. It is a sad state of our reality, when a Nobel laureate Tweets he is worried about his ideas being censored: “I have been fearful that presentation of [quality-adjusted life-year] or [year of life lost] Covid-19 data would result in immediate banning” (Levitt, 2022 [Tweet]).

As a baseline to any argument, the mainstream media accepted guidelines on Covid-19 published by the WHO and CDC. However, the problem was not only the constant change to the guidelines, but the lack of rationale and logic (Annas & Galea, 2021). The development of the pandemic reality can be seen in Table 6-1, which summarized the masking recommendations by the CDC. This advice moves from leaving masks to the health care professionals in February 2020, through to no need for masks in March, to CDC recommending masks for the sick a few days later, then masks inside (April 2020), supported by a study ‘masks work’ in July 2020, through to wearing two masks recommended by Dr Fauci in January 2021. The vaccinated did

not need masks in May 2021, but do need masks two months later, in July. Finally, no masks were needed in February 2022. Around the world those rules were adjusted in similar speed according to ‘the science’. Israel scrapped mask order in April 2022 and NZ in September 2022.

Table 6-1: Masks recommendation development

MASKS		
Feb 29, 2020	Sur general	leave masks for HC professionals
March 8, 2020	Fauci	there is on reason for a mask
March 30, 2020	CDC	masks recommended for sick
April 3, 2020	CDC	masks inside
July 14, 2020	CDC	study: masks work
Jan 20, 2021	pres. Biden	executive order for mask wearing
Jan 25, 2021	Fauci	wearing two masks
May 14, 2021	CDC	vaccinated do not need masks
July 27, 2021	CDC	vaccinated need masks
Feb 26, 2022	CDC	masks no needed inside
April 3, 2022	CDC	no masks on transportation

6.3.3.2 Vaccination

A similar dilemma occurred with vaccinations. The definition of vaccination developed with time as well. As noted by Loe (2022), Merriam-Webster dictionary, as well as CDC, changed the definition of a vaccine in September 2021 from “A product that stimulates a person’s immune system to produce immunity to a specific disease, protecting the person from that disease” (para 1), to, “A preparation that is used to stimulate the body’s immune response against diseases” (para 2). A vaccination changed from, “the act of introducing a vaccine into the body to produce immunity to a specific disease” (para 3), to, “the act of introducing a vaccine into the body to produce protection from a specific disease” (para 4). The key difference is the absence of the word “immunity” in the latest definition and the replacement by ‘protection’. Immunity is possible to measure with an immunoglobulins blood test. Protection is not. WHO education videos from August 28, 2020, explained the need for Covid-19 vaccination: “...the SARS-CoV-2 virus is a highly transmissible virus. We think it needs at least 60 to 70% of the population to have immunity to really break the chain of transmission. If you allow this to happen naturally, it will take a long time, of

course, but more importantly, it's going to do a lot of collateral damage... so naturally, the better choice is doing it through a vaccine" (WHO, 2020, p.1). The message about the need for a safe and effective protection is clear. However, just a brief summary of a small portion of official Tweets on the efficiency of vaccines, shows a problem (Table 6-2).

Table 6-2: Vaccination facts development

Official messages about vaccination		
Jan-21	CDC	First Covid-19 breakthrough cases being reported
Mar-21	CDC	Data suggest fully vaccinated people do not carry Covid-19
Sep-21	CDC	Employer cannot ask for a medical information
Apr-21	CDC	Vaccinated do not carry Covid-19 virus
May-21	Dr. Fauci	Vaccinated are dead end for Covid-19
Jul-21	CDC	Vaccinated can transmit Delta variant
Jul-21	Pres. Biden	Vaccinated do not get Covid-19

Rochelle Walensky, then director of CDC, said on March 29, 2021, on MSNBC: "Our data suggests that vaccinated people do not carry the virus, don't get sick.... And that it's not just the clinical trials, it's also in real-world data" (Clintolo, 2023 [Tweet]). This statement was based on a peer review study by Thompson, et al. (2021). However, on April 15, 2021, break-through infections of 5,800 vaccinated individuals were reported by CDC in the US alone (Tinker & Fox, 2021). On July 27, 2021, updated guidance of CDC informed that "vaccinated people can transmit the virus" (CDC, 2021, p. 1). The official messaging during the last three years was anything but consistent, because, as Pfizer representative Dr Lauren Small testified in EU parliament, "We had to really move at the speed of science" (Chung, 2022, para 2).

Another problem was the definition of a vaccinated person, as explained in a study by Fenton et al. (2022). The clarification of who is and who is not considered

vaccinated makes a significant difference in Covid-19 statistics and leads to an absurd graph (Figure 6-8), where death from non-Covid-19 reasons disproportionately increased for the unvaccinated a few days after the introduction of the vaccine. The study asked, “How is it possible that unvaccinated experience an increase in non-Covid-19 related mortality in sync with the start of the vaccination?” (Fenton et al., 2022, p.7). The findings would suggest a logical conclusion that taking the vaccine increases drastically the overall mortality of the unvaccinated. During pandemic it would make a sense if those death were Covid-19 related. However, that is not the case. The data presented are for non-Covid-19 mortality (ibid).

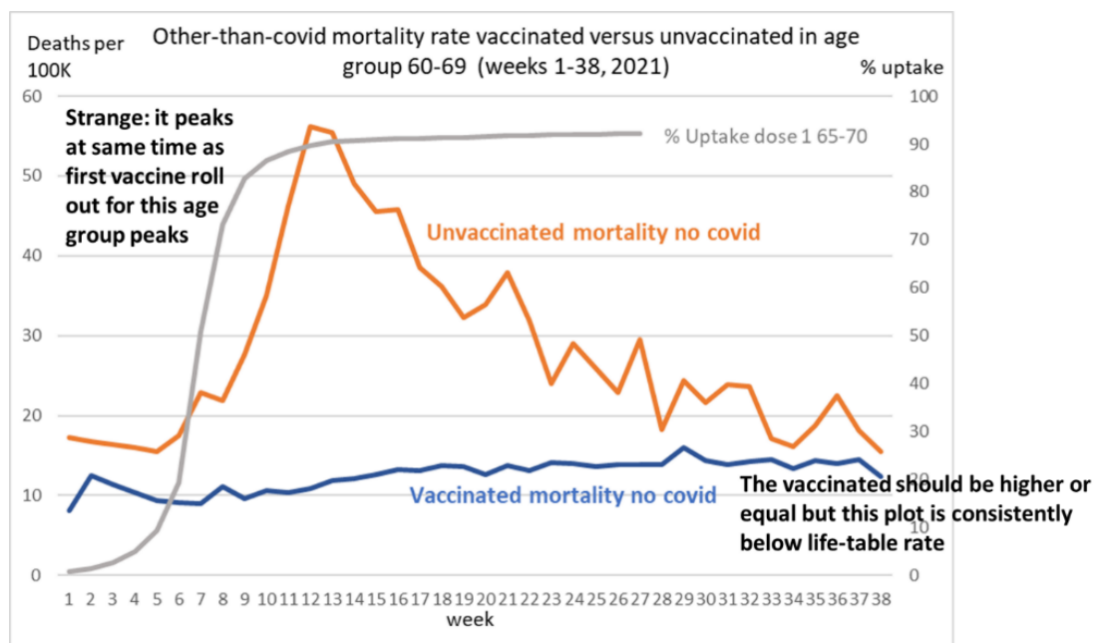


Figure 6-8: UK mortality

As seen in Table 6-3 (ibid), people are counted as vaccinated only 3 weeks after the first injections. These findings were supported in EU parliament hearing in a presentation of MP Marcel de Graaff and MP Joachim Kuhs, “It was redefined what being vaccinated is, that was the key. So even if you died from the vaccine you were counted as an unvaccinated” (Kuhs, 2023, 10:00 [Tweet]).

Table 6-3: Definition of vaccinated

Author/Journal	Definition of vaccinated
Dagan et al., 2021. NEJM	7 days after 2nd dose
Haas et al., 2021. Lancet	7 days after 2nd dose
Andrews et al., 2021. NEJM	28 days after first dose
Baum et al., 2022. BMC	22 days after first dose
Buchan et al., 2022. JAMA	7 days after 2nd dose
Corazo et al., 2022. Lancet	7 days after 2nd or 3rd dose
Chung et al., 2022. Inf Disease	7 days after 2nd dose
Angel et al., 202. JAMA	7 days after 2nd dose
Argel et al., 2022. NEJM	boosted' status 7 days after 3rd vaccination
Steyn et al., 2022. Inf Dis Model	vaccinated with 2 doses, no time frame

Vaccinations became, after lockdown and masks, the most controversial and polarizing topic on social media (Alam et al., 2021; Chinnasamy et al., 2022; Scannell et al., 2021; Xu et al., 2022). Research on Covid-19 vaccination acceptance investigated Tweets across 12 weeks from January 2021 to March 2021 and noticed the volume and mood of Tweets: “Positive sentiment contributed the most in overall sentiments of Twitter users (732,395), followed by neutral (579,493) and negative (525,866) sentiments” (Chandrasekaran et al., 2022, p.19). However, a study by Umair & Masciari (2023) concluded: “People at the beginning held a positive attitude. But over time their feelings about the vaccine shifted since they had high expectations for the vaccine’s effectiveness, but the outcome was disappointing” (p.3).

The vaccination during pregnancy debate was, and remains, controversial (Kalafat et al., 2021). Risk benefit analysis is being debated nonstop (Goldshstein et al., 2021; Comit, 2023). In November 2021, Simon Thornley, from Auckland

University, and epidemiologist Aleisha Brock, published a study linking miscarriage to Covid-19 vaccines (Brock & Thornley, 2021). On November 17, 2021, a letter from University of Auckland calling for a retraction of the paper was posted on Twitter. Dr Thornley withdrew the paper under pressure (Collins, 2021). In Israel Professor Eran Dolev, former chairman of the Israel Medical Association’s Ethical Board, resigned from the ‘Corona Vaccine Committee’: “I said pregnant women should not be vaccinated, as no company had tested for it... I said at least have them sign an informed consent.... I was rejected.” (Sela, 2021 [Tweet]).

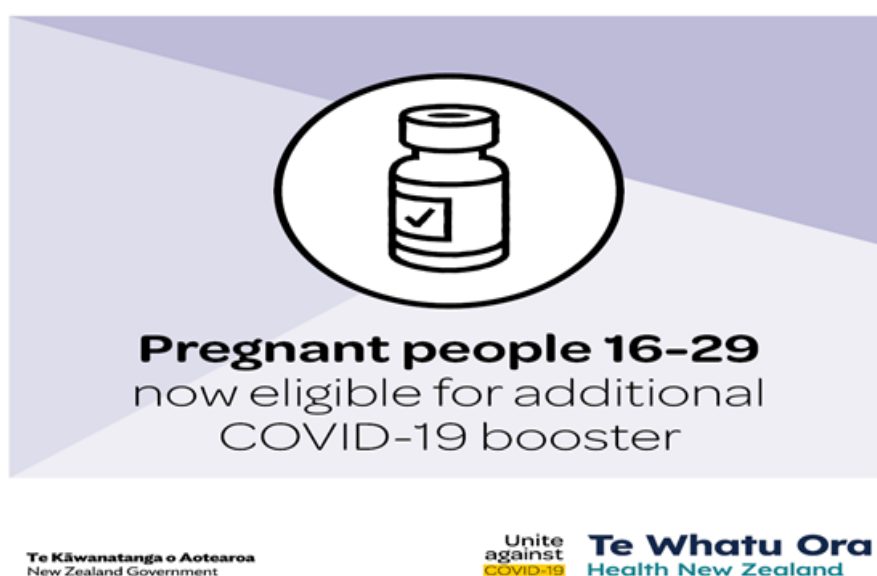


Figure 6-9: Pregnant people are eligible for booster

The message in this New Zealand government advertisement (Figure 6-9) is intriguing. Why does it specify the age group 16 – 29 as eligible for a booster? There is agreed knowledge the virus is more dangerous for older people (Mueller et al., 2020; Santesmases et al., 2020). Data from Israel, based on FOIA, and analysed by Josh Guetzkow from the Hebrew University, showed the odds of stillbirth, abortion or miscarriage were 1.36 times higher in the vaccinated (Guetzkow, 2022). I could not locate a study providing an evidence-based argument supporting the NZ government’s advertisement with an age restriction.

Vaccination mandates were based on the hypothesis that vaccinated people do not spread the Covid-19 virus. (Giubilini et al., 2023; Liam, 2022). The increase of Covid-19 positive cases in 2021 was described as ‘The pandemic of the unvaccinated’ (Bor et al., 2023; Zamir and Gillis, 2022). However, Professor John Ioannidis, author of over 1000 peer review articles, concluded the vaccine could not stop the transmission. His study was rejected for publication, “MedRxiv declined to post my paper as a preprint claiming it was dealing with a sensitive public health issue” (Prasad, 2022a, p. 1). Ioannidis appealed, lost, re-appealed, and only months later was able to publish his study in a scientific journal. “By that time many public health authorities in many countries had fallen headlong in the trap of believing that people who get vaccinated will not transmit and vaccines all alone were enough to halt the epidemic waves. The consequences were grave. In most developed countries, despite vaccination in 2021, excess deaths were higher in 2021 than in 2020” (Prasad, 2022a, p. 2).

Israel’s vaccination drive came to a standstill after the vaccination mandates were lifted. A study ‘Attitudes of Healthcare Workers in Israel towards the Fourth Dose of Covid-19 Vaccine’ showed 83% health care worker took two Pfizers, out of those 58% received the first booster. However, 83.3% of nurses and 53.9% of physicians stated they would not take the fourth vaccine, available from December 2021 (Ramot & Tal, 2023). The current (August 4, 2023) vaccination status in NZ is seen in Figure 6-10 (Plushie, 2023 [Tweet]). Nurses practising in NZ were mandated to be vaccinated from November 2021 till September 2022 (NZNO, 2023), resulting in 399 nurses having their employment terminated, with 61 resigning and another 161 stood down (MoH, 2022, July 12).

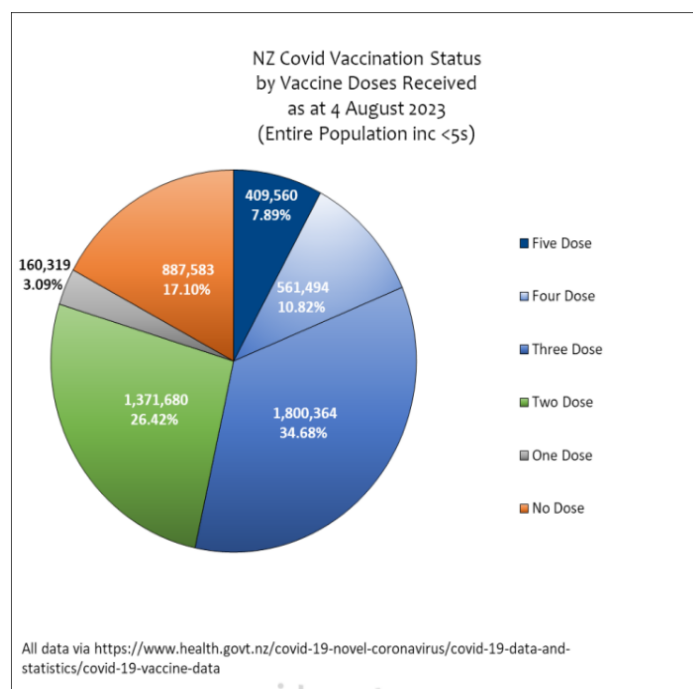


Figure 6-10: NZ vaccination status

6.3.3.3 Silencing of reports on vaccination injuries

One of the most prominent voices about the Vaccine Adverse Event Reporting System [VAERS] system is Dr Jessica Rose, an applied mathematician, immunologist, and molecular biologist. Her substack, ‘Unacceptable Jessica’, as well as her various presentations, for example at the EU parliament or the World Council for Health, present an analysis of data from VAERS. At the moment the Tweeted information is concentrating on the difference between FDA approved vaccine and the doses actually distributed (Guetzkow & Levi, 2023), as well as the presence of DNA fragments in the vaccines (Speicher et al., 2023; Krug et al., 2023; McKernan et al., 2023).

Vaccination problems were voiced in Israel on social media from the start of the vaccination drive. Professor Retsef Levi analysed data on ambulance calls and raised the question of myocarditis in his Tweets, as well as a YouTube message (Levi, 2021). His findings were published in a peer review paper one year later, ‘Increased emergency cardiovascular events among under-40 population in Israel during vaccine

rollout and third Covid-19 wave’ (Sun et al., 2022). In Florida the State Surgeon General raised similar concerns about side effects of vaccination and, “Is notifying the health care sector and public of a substantial increase in Vaccine Adverse Event Reporting System (VAERS) reports from Florida after the Covid-19 vaccine rollout” (Florida Health, 2022 [Tweet]). Tuvali et al. (2022) study of Israeli data examining cardiological problems related to Covid-19 concluded that the virus itself does not increase the incidence of myo/pericarditis. A study by Walton et al. (2023) concluded that mRNA vaccination is related to an increase of myo/pericarditis: “Although rare, a statistically significant association between BNT162b2 vaccination and myo/pericarditis and AKI was observed” (p.12). The debate on those, and other findings, are present on Twitter and in live Twitter spaces, where scientists are exchanging their experiences and data from the field.

New Zealand government web site emphasised: “Having Covid-19 does not provide the same level of immunity as getting vaccinated. To keep your immunity levels high, stay up to date with your vaccinations — including boosters. This will lower your chances of getting very sick from Covid-19 and ending up in hospital” (Government NZ, 2023, para 2). At the same time a study ‘IgG4 antibodies induced by repeated vaccination may generate immune tolerance to the SARS-CoV-2 spike protein’ by Uversky et al. (2023) concluded that boosters should be approached with caution, and other papers suggest multiple vaccinations increase the risk of Covid-19 due to trained toleration of the immune system to the spike proteins (Goh et al., 2022). A Tweet from Michael Levitt (Figure 6-11) indicate even more problems related to the artificial spike protein, mentioned also in a study by Trougakos et al (2022).



Figure 6-11: Michal Levitt's mRNA Tweet

As noted above, censorship and self-censorship was present during the pandemic (Elisha et al., 2022; Shahar, 2022; Shir-Raz et al., 2022; Thomas, 2023; Younes & Kheriaty, 2023). As such, scientists argue for the need of open discussions. The problem with one official narrative is illustrated in Table 6-4, which shows the evolution of misinformation to an evidence-based facts of some of the Covid-19 themes.

Table 6-4: Misinformation

'Misinformation'	Initially mentioned via social media	Accepted and published with peer review support
Covid-19 is less deadly than official information	Mizumoto & Chowell, 2020; Giesecke, 2020; Kulldorff, 2020; Bendavid et al., 2020	Ioannidis, 2022; Ioannidis et al., 2022; Levitt et al., 2022
Ventilator protocol is problematic	Kyle-Sidell, 2020	Gao et al., 2023
There is a Covid-19 treatment	Ongoing debate, peer review literature supporting the 'misinformation': Argano et al., 2023; Assouline et al., 2021; Bitterman et al., 2022; Borsche et al., 2021; Bryant et al., 2021; Joshi et al., 2021; Megna et al., 2022	
Vaccines will not stop transmission	Doshi, 2020; Yeadon, 2020; Seneff, 2020; Doctor, 2022; McCullough, 2020; Ioannidis, 2020	Muhsen et al., 2022; Shitrit et al., 2021; CDC, 2021
Vaccines have side effects	Ongoing debate, peer review literature supporting the 'misinformation': Fraiman et al., 2023; Hu et al., 2023; Irrgang et al., 2022; Li et al., 2023; Rose, 2022, August 6, 2023; Uversky et al., 2023; McKernan et al., 2023; Li et al., 2022; Schmeling et al., 2023; Fraiman et al., 2022; Cho et al., 2023	

6.3.4 Questioning

In 2022 the World Council for Health (WCH) was formed as an opposition to WHO and its pandemic approach (WCH, 2023b). The debates for and against free flow of information are constant. Since December 2022, 'Live Twitter spaces' are being held with international audiences. One of the first meetings, 'New Year Reunion: Free speech saves lives', with Dr Robert W Malone, Dr Tess Lawrie, Dr Pierre Kory – all people who were blocked on Twitter during 2021/22 and are still blocked on Facebook and YouTube – went for over 4 hours and had 50,000 listeners from all over the world. The findings from this discussion were incorporated into

presentations at the Third Covid-19 Summit in the European Parliament in May 2-4, 2023 (ICS, 2023), Figure 6-12.

Israeli Public Emergency Council for the Covid-19 crisis [PECC] shares information on their web sites as well as on Twitter and organised international zoom meetings to share and collaborate on various topics with speakers, such as Scott Atlas (Covid-19 adviser for Donald Trump), Retsef Levi (MIT professor risk management), Yaffa Shir-Raz (investigative journalist) and others. They provided the counter narrative and evidence-based science on Covid-19 matters. However, the information cannot be found in mainstream scientific venues, highlighting the loss of debate that exists around the virus.



Figure 6-12: International Covid Summit

6.4 What about the nurses?

In 2020, the year of the nurse, health care workers were the heroes. They were a symbol of the fight against the virus. By late 2021, with ‘pandemic fatigue’, a shift could be seen in social media from clips of dancing nurses and trending hashtags on ‘support of our health care heroes’, to verbal attacks. The divided world of social

media is cruel, and merciless, the sudden violence, anger and frustration are topics that should be investigated (Dopelt et al., 2022).

As is evident from a short overview on some of the Covid-19 themes, the available data are contradictory. What is a nurse to do, when CDC includes Covid-19 vaccination as a part of a child's routine schedule (Wodi et al., 2023), at the same time as UK renowned cardiologist Dr Malhotra calls for an immediate suspension of all mRNA vaccines. A further his arguments are supported by peer review studies (Bardosh et al., 2022; Husby et al., 2023; Kaimori et al., 2022; Malhotra, 2022a; Nushida et al., 2023; Schwab et al., 2022; Sun et al., 2022; Suzuki et al., 2022).

Are nurses expected to keep up with the latest information, often inconsistent, in accordance with due diligence? This can be difficult when we know that three hundred and fifty scientific peer reviewed papers on Covid-19 were retracted as of June 30, 2023 (Marcus, n.d.). Each month of the pandemic, eleven academic articles on Covid-19 were withdrawn. According to Gunnveig Grødeland, a senior researcher at the Institute of Immunology at the University of Oslo, many researchers took ethical shortcuts when writing their papers (Shaw, 2023). The information during the pandemic changed rapidly, as can be seen in the development of findings in peer review articles on the Pfizer vaccination data from Israel (Table 6-5). For example, by the time a recommendation for a third dose/booster was published in October and December 2021, the said booster was already waning in effectiveness, and the need for a fourth dose / second booster was discussed.

Table 6-5: Pfizer in Israel 2021

Vaccination drive started on December 19, 2020, booster followed on July 30, 2021		
2021 studies	Findings from Israel based on data from Israel	Citation
February	Substantial early reductions in infection and symptomatic Covid-19 rates	Amit et al., 2021
March	Decreased viral load after vaccination, and suppression of transmission	Levine-Tiefenbrun et al., 2021
April	Vaccine is effective for a wide range of related outcomes	Dagan et al., 2021
May	Vaccine reduces transmission, effective against hospitalisation, severe disease, death	Haas et al., 2021
July	Vaccine effectiveness prevents infections 80-95%	Regev-Yochay et al., 2021
August	Household transmission 40-50% lower in vaccinated	Harris et al., 2021
September	Waning immunity, protection for individuals without comorbidities. Third vaccine may be needed	Shitrit et al., 2021
September	Vaccine was associated with an excess risk of myocarditis	Barda et al., 2021
October	No secondary infection, vaccinated health care workers less contagious than unvaccinated	Bergwerk et al., 2021b
October	Fading effectiveness, third dose recommended	Goldberg et al., 2021
December	Vaccinated can be positive and need testing. Booster recommended	Canas et al., 2021
December	Incidence of myocarditis increased after vaccine, particularly after the 2nd dose among young male recipients.	Mevorach et al., 2021
December	Recipients of a booster more than 5 months after 2nd dose had 90% lower mortality	Arbel et al., 2021

6.5 Conclusion

This chapter began with the objective of identifying useful tools and support systems that could have been provided to nurses and other healthcare professionals to help them cope with the challenges posed by the pandemic. Unfortunately, no such resources were identified. Instead, what this chapter reveals are the pervasive

contradictions surrounding the 'evidence' disseminated on social media throughout the three years of the crisis.

I explored several examples of these contradictions, such as masking and vaccinating mandates, highlighting how credible voices in the scientific community were often marginalized or silenced. This chapter also examined the frequent and confusing changes in policy announcements from organizations such as the World Health Organization (WHO) and various national governments. This inconsistent messaging created an environment fraught with uncertainty, forcing nurses and healthcare professionals to navigate a landscape filled with conflicting information and guidelines.

In this turbulent context, healthcare workers faced a dual challenge: they received no direct support to address their needs, while simultaneously being inundated with contradictory information. The only constant in this environment was the systematic silencing of dissenting voices, which further complicated their ability to make informed decisions in their practice. Ultimately, this chapter underscores the urgent need for reliable support and clear communication for healthcare professionals during times of crisis.

The development of information, the discrepancies between official narrative and situations on the ground, will be explored in Chapter Eight within the frame of the 'cake' layers model, suggested for the fight with 'infodemic' (Eysenbach, 2020; Gallotti et al., 2020; Tangcharoensathien et al., 2020; Tsao et al., 2021). This model allows for examination of the movement of data up and down between the macro – government and official policies, meso - social media, newspapers and micro, the nurses on the ground. My next chapter gives a voice to nurses in Israel and New Zealand. They discuss their experiences working during the pandemic, share their observations, plans for future, and opinions on the health care system's role in managing the crisis.

Chapter Seven: Voices of the Nurses

In this chapter I first include my field notes and detailed accounts of events and personal insights of working as a nurse during the pandemic. Next, the interviews of nurses in Israel and New Zealand are presented. Taking a case study approach, the chapter describes the participants and their working orientation and then describes the themes that emerged within each country. These narratives are compared to look for commonalities and differences in their experiences.

As indicated in Chapter Four, a combination of storytelling, alongside Fairclough's order of discourse and social orders, was used to gain a deeper understanding of the power dynamics and discursive practices that shaped nurses' experiences during the Covid-19 pandemic. This approach helped to reveal the ways in which nurses navigated and negotiated power relations within their health care systems, as well as the discourses that influenced their values and perceptions. It sheds light on the coping strategies employed by nurses to navigate these power dynamics and discursive practices. The Colorado State University design, adopted from Creswell & Cresswell (2018) and Creswell & Poth (2016), as seen in Figure 7-1, was used as a framework for my work.

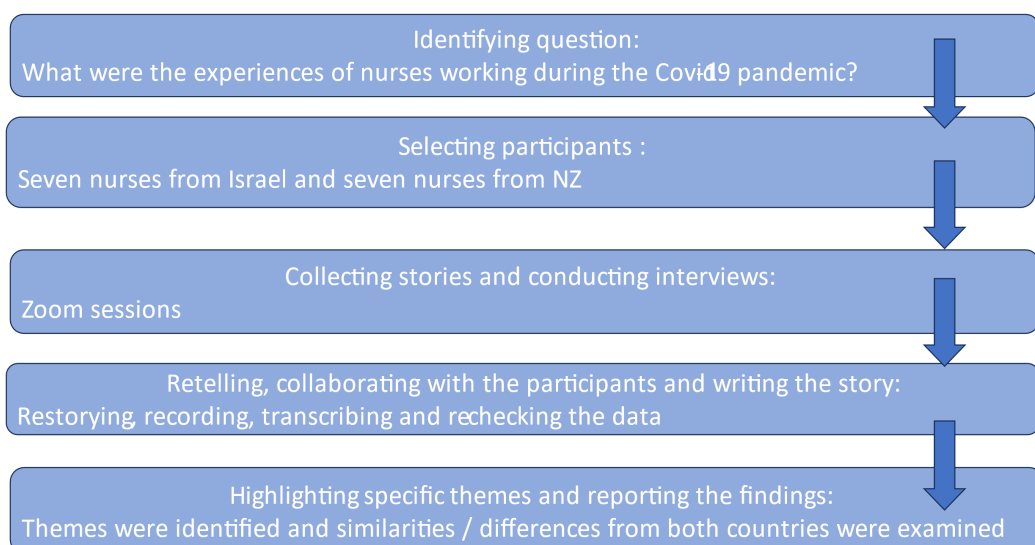


Figure 7-1: Narrative research design

A question was identified: **What were the experiences of nurses during the Covid-19 pandemic?** Seven Israeli and seven New Zealand nurses were interviewed in November 2022 via zoom. Participants were selected via snowballing, as discussed in Chapter Four. Interviews were conducted in English, with Israeli nurses occasionally slipping into their hospital working language (Hebrew). Interviews were recorded and translations were provided where needed. Pseudonyms were assigned to the participants to protect their identity. Demographic data obtained included the area worked, work experience as a nurse, number of Covid-19 vaccinations, whether they had contracted the virus, and first language. For Israel, military service was also indicated, since health care workers do participate in mandatory army service and hospital personnel are trained for mass casualties and crisis management; and experiences utilized during Covid-19 times (Levy, 2022). Table 7.1 and 7.2 provide the relevant demographic data for each nurse.

7.1 Personal reflections of a nurse in the pandemic

Having family and friends all over the globe I started to notice the different information regarding this novel virus and how countries were managing it. I became acutely aware that the world of social media also polarized people very early on, with emotional posts from both sides of the pandemic story, inciting anxiety and fear of this unknown little weapon of a virus, while governments engaged in metaphors aligning the virus to an enemy to be fought (Santos, 2023). I started to collect articles and notes with contradictory information, participated in zooms, Facebook, Twitter and Telegram debates. I was trying to make sense of the flood of information, rules, guidelines, statistics. I told my parents, living in Eastern Europe, to start taking Vitamin D, C, and Zinc; reasoning that it could not do them any harm and seeing that our patients in the Covid-19 wards had low levels of Vitamin D. For me, the debate around Vitamin D was the first illogical reality of media emotional reactions. Why should we not try to give an available supplement, approved by medical authorities, the harm of which is known to be minimal, especially in a situation where we did not know what to do? The official mantra was that there is no cure for Covid-19, patients should stay at home unless they have a severe drop in oxygen saturation. It was not what I believed in as a nurse.

Then came the heated debates on masks, ivermectin, chloroquine. President Trump's 'lung cleaning' statement taken out of context followed by the Covid-19 positive diagnosis of this chubby, junk eating elderly man, who within days of hospitalization climbed stairs to show the TV cameras he is better. The media went into frenzy about the president's super spreader event, but the reality, that nothing happened, was not mentioned. However, those discussions were nothing compared to the lockdown fights. The "conflict between granny killers⁹ and humanitarians" (Frijters et al., 2021, p. 28) became really violent, name callings and personal assaults on social media became the norm. The message was not being debated; the messenger of such debates was attacked instead, as can be seen, for example, in an 'Open letter from Stanford University regarding Dr Scott Atlas' (Pizzo et al., 2021; Atlas, 2021).

And then masking, social distancing and school closure arguments rolled into vaccination debates. A flood of statistics and explanations and counter explanations and counter statistics of Covid-19 numbers through various lenses was ever present. People advertised their strong stands by banners with variations of: 'I am vaccinated' or 'I am not vaccinated' status on social media. Discussion and exchange of different opinions became hard-line and self-censorship a reality. Researchers and scientists lost their jobs for publicly sharing their research and their opinions and were prevented from publishing in peer reviewed journal articles, if their views or findings were different to government and WHO narrative (Shir-Raz et al., 2022).

In December 2020 Pfizer arrived in Israel and I signed up as a vaccination volunteer and received Pfizer training with an explanation on how mRNA vaccines work. I received my first vaccination on December 20, 2020, and started my extra shifts in a vaccination tent in Tel Aviv. The atmosphere was amazing. People were so happy to receive the vaccine, it was the ticket to normal life. Israelis were taking selfies and posting them on social media. During that time the vaccination vials needed to be stored at a very cold temperature and had a short expiry time. On

⁹ Media coverage relating to children being told not to visit their grandparents in case they spread the virus and kill their grannies. Media coverage around this was terrifying and explicit. See for example, <https://www.reuters.com/article/world/uk/dont-kill-your-gran-britain-sounds-covid-alarm-idUSKBN25Z0UM/> and <https://www.theguardian.com/world/2020/aug/07/preston-added-to-areas-with-bans-on-households-mixing-due-to-covid-19>

January 4, 2021, it was realized we had too many vaccines out of the freezer, so a message was sent to teachers in Tel Aviv to come over and “get the Pfizer ” (Staff, 2021a). We were vaccinating at a rapid speed, the hospital head nurse was cheering us on, people were rolling up their sleeves in front of the tent, they walked in, their health card was swiped, a shot was given, the next appointment was automatically sent to their phone app. It took less than five minutes per person, including all the information I needed to provide to the vaccine recipient. And at night, we received ice-cream from the hospital’s chief executive officer as a thank you, the thawed vials were used, there was no need to throw them away (Figure 7-2).



Figure 7-2: Vaccination drive ice cream

We were super proud, that we saved so many lives. And next day the tent was shut down. The Ministry of Health was displeased because we had vaccinated teachers outside of the official policy. People with appointments were turned away. We were not allowed to vaccinate. There was a heated debate on TV, in the hospital, on social media, about who was right and who was wrong. It simply did not make sense. After all, the vaccine drive was meant to help reduce the deaths from Covid-19 and increase the population’s resistance to the virus.

Later, I flew to visit my parents in the Czech Republic. I was double vaccinated, meaning, according to the authorities, I was safe. When in the Czech Republic, I discussed the Israeli vaccination drive on Czech TV, radio, newspapers

(Figure 7-3). I was the poster child for a safe and effective vaccination that would bring our pre-Covid life back.



Figure 7-3: My vaccination drive in Israel's newspaper and on Czech TV

After few days of being on vacation with my parents, I received a message from Israel that the country was going into full lockdown, including the borders. I had 24 hours to return to Israel and I needed to present a negative PCR before boarding the plane. Upon my arrival in Israel, I needed to pass another PCR test and was told by the head epidemiologist of my hospital that because I crossed the borders less than seven days from my second vaccination dose, I need to go into 14 days isolation. It was the first time I heard about being 'unvaccinated' until 21 days after first Pfizer. (The concept of the definition of 'unvaccinated' played a role in official Covid-19 statistics and was discussed in detail in Chapter 6). Being in isolation, with lots of free time, I started to do my research on mRNA vaccinations, collecting data on Covid-19 numbers. Israel was the leading country in vaccination rates and simultaneously engulfed in the worst Covid-19 wave since the beginning of the pandemic. Climbing numbers of vaccinated were overshadowed by climbing numbers of those testing positive. And I was sitting at home, with two Pfizers, three negative PCR tests, unable to care for my patients. Upon my release from isolation, I was called into the head nurse office and informed I put the whole vaccination program in danger by traveling.

It was suggested I leave, so I transferred to a different hospital. And I declined to further participate in the vaccination drive. The message ‘vaccination will set you free’ started to become problematic.

Vaccination mandates in Israel commenced in March 2021 (Kamin-Friedman & Peled Raz, 2021). My unvaccinated friend asked me to pick up books from the library for his child. It was faster for me to do it than for him to line up for a negative PCR test, which served as a substitute for the two Pfizer vaccines (Figure 7-4).



Figure 7-4: Green passport

The vaccination mandates were full of absurdities. My gym was mandated six days a week, on shabbat there was no official control, so unvaccinated people could come in. During vaccine passport days the time allowed for each swimmer to be in the swimming pool was 45 min, and there was a ‘safety break’ 12-12:15, when no swimmers were allowed in the water. The epidemiological argument that the pool water should sit empty for 15 minutes, to prevent airborne virus spread, was a mystery. The gym had 90-minute slots with 15 min breaks for disinfectant spraying (Figure 7-5). During the 15 minutes ‘virus elimination break’ everybody needed to

put a mask on and wait in a crowded passage. Upon entering the gym area masks were no longer mandatory.

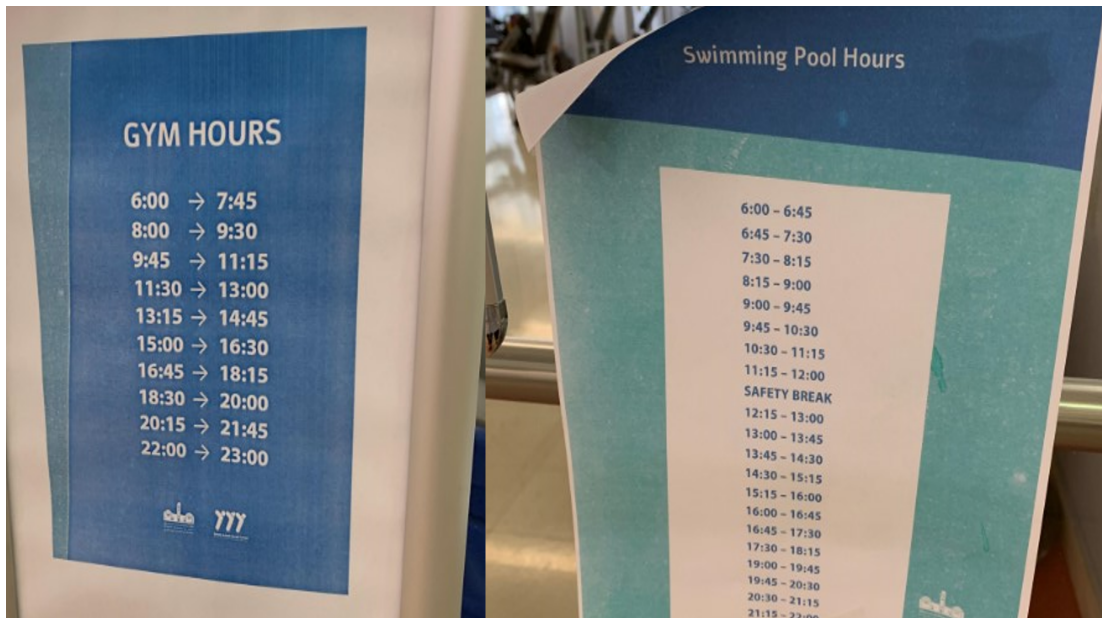


Figure 7-5: Vaccination mandate in Jerusalem gym

As I started questioning the logic of virus controls (or rather, the lack of it), I received an invitation to anti-mandate weekly protests. There I met vaccinated as well as unvaccinated people questioning the vaccine efficiency, the ethics behind the mandates, and the government's Covid-19 policies (Barak, 2021; Barak, 2022). I will never forget an elderly lady, a holocaust survivor, Heni (Figure 7-6), who every Saturday, walked around Tel Aviv with a sign comparing the green vaccine passport to the Nazi passport. As a child she could not go to movies, or restaurants. And now, she again had the wrong papers and could not join her friends in fun activities (Goldberg, 2021). We were closing schools, putting children in lockdowns, and vaccinating nurses to save the grannies, but somehow nobody asked the granny, if she actually wanted to be saved (Dodsworth, 2021).



Figure 7-6: Holocaust survivors on anti-mandate protests in Israel

I lost my 'green pass status' in Israel, when I did not report for the 2nd booster. As Figure 7-7 illustrates, the message on my 'Green Pass' smart phone application reads: "Our records show that you do not meet the eligibility criteria for a green pass. Open an inquiry with your HMO". However, my EU vaccination pass, based on three Pfizer doses received in Israel, is still valid (Figure 7-8). Not only rules, but also exemptions are different, depending on the state you live in.

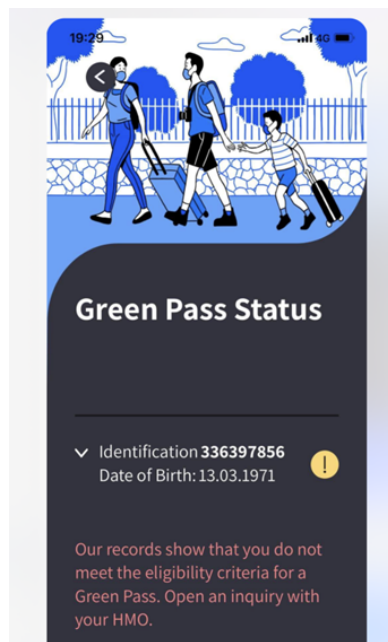


Figure 7-7: Israeli green pass



Certificate issuer

Ministry of Health of the Czech Republic

Unique certificate identifier

URN:UVC1:01:CZ:GYHC23
7G94U4N5QMNKSZUPJX
DA8J995J

The validity information is indicative for the certificate holder only and is not authoritative for the verifier. The verifier validates the certificate using his own QR reader.

State: VALID

Figure 7-8: EU green pass

When the official children vaccination campaign started in Israel, the protests grew in numbers. The topic was very emotional. Doctors and nurses in scrubs with stethoscopes walked in the protest marches. As of December 31, 2022, only 18.44%

of children 5-11 years old received the first two vaccines, with 0.37% being vaccinated with a booster (Health IL, 2022). After the cancellation of the vaccination mandates, the vaccinated numbers dropped across all ages, and by 2023 only about 2% of Israelis are fully vaccinated, meaning it is less than six months since their last booster.

When the war started in Europe in February 2022, I volunteered for a humanitarian mission on the Moldova/Ukrainian border. We were assisting refugees without tests, without masks, and no social distancing. Around 35% of Ukrainians are officially vaccinated. We had many problems during the four months I was working in the crowded refugee camps. But Covid-19 was not one of those problems. When I was allowed to enter New Zealand, at the end of June 2022, it was like going back in time. Masks, tests, isolations. And Covid-19 positive numbers in NZ were climbing. Interestingly, Prime Minister Jacinda Ardern was no longer providing official information briefings on Facebook or TV. More people died of Covid-19 in vaccinated New Zealand in 2022 than during the first two years of the pandemic (Bhattacharya, 2022b) and as Gabel and Knox (2023) noted, no official investigation has adequately addressed this problem.

7.1.1 Nurses: Patient advocate

The NZ Nursing Organisation (NZNO) in 2021 held a professional forum, 'Every nurse is an advocate: Influencing through advocacy' (Rolls, 2021). Suzanne Rolls, NZNO professional nursing advisor, cited the Cartwright inquiry in NZ: "Nurses, who most appropriately should be the advocates for the patient, feel sufficiently intimidated by the medical staff that even today they fail or refuse to confront openly the issues arising from the 1966 trial" (slide 12). Nurses are patient's advocates. As per the NZNO presentation, they should feel safe while questioning a doctor's order, protected by their organizations, as can be seen on NZNO's slide (Figure 7-9). However, health care professionals who try to impact, or even doubt, official policy, are risking their licenses.

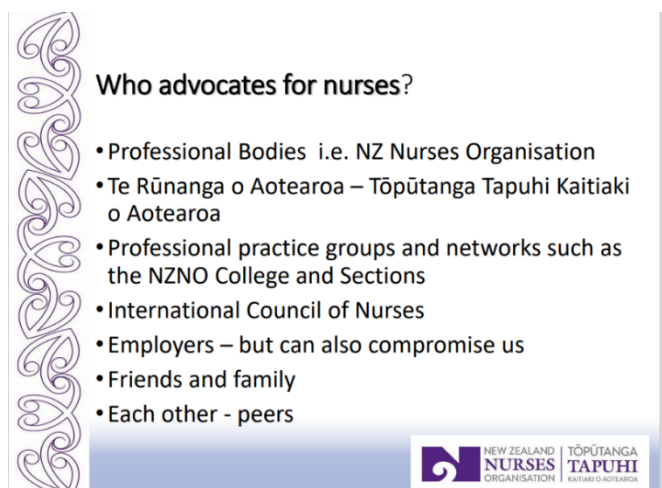


Figure 7-9: NZNO presentation: Who advocates for the nurses?

I asked myself: Do nurses feel safe to voice their opinion, to advocate for their patients, to discuss available treatment options against a doctor’s instruction and even more importantly, against the system? Clinical advocacy should ensure the voice of the patient is heard and respected. What about patients asking to see their families while hospitalized? They were not allowed to, even though in the Māori and Pacific cultures, having family close by is an important healing element. In Israel, ultra-orthodox communities provided care for Covid-19 patients at home, refusing to have them admitted to hospital (Gabay and Tarabeih, 2021). Birthing alone and dying alone are taboo. Yet, women were being separated from a newborn during Covid-19 (WHO, 2021a).

Then there was a landmark case in New Zealand around ‘Baby William’ who required life-saving heart surgery. His parents requested that their baby did not receive vaccinated donor blood, providing a list of unvaccinated donors. It made the front page of the media, social media, and television for days. In the end, the parents’ rights were revoked by the government, the baby was removed from the parents and placed into care for the duration of the surgery (McClure, 2022). Corlett (2022) quoted the lawyer as saying, “We have concluded that the government cannot afford anything to go wrong for Baby W, as the world is watching. He is likely to get the best possible care with the best safest blood” (para 2). Yet Wilson (2022) argued that

the resistance to the blood donation for this family goes much deeper. It is also a matter of trust arguing that “Māori vaccination rates are significantly lower than non-Māori. Think their interactions with power have gone well? Turns out that the way authorities treat people affects how the people treat authorities.” (para 3). Thus, the nation became divided over freedom of choice, rights of a child and the rights of its parents. Meanwhile, the New Zealand Nursing Organisation cited some Māori wisdom, thus:

“Karakia Kia hora te marino Kia whakapapa pounamu te moana Aroha atu, aroha mai Tātou I a tātou katoa”.

“May peace be widespread. May the sea be like greenstone. A pathway for us all this day. Let us show respect for each other.”

I share this story, because it brings so many questions and debates around vaccinations and the freedom of people to choose to have it or not. For cultural reasons, many Māori were ‘vaccination hesitant’. The question for this thesis is, are we showing respect by silencing the few who dared to ask the difficult questions? Māori also say:

“Ko te whare kī tonu i te iwi he whare kī tonu i nga whakaaro rerekē.”

“A house full of people is a house full of different ideas.”

The tensions raised in these debates spilt over into the advocacy role of health professionals. Nurses, who were on the frontline of the virus for over a year without vaccination were now told that they were not allowed to work unless vaccinated. Likewise, they had to tow the party line of vaccination benefits, even when questioning the logic of the narrative. Debate and discussion were denied. As with the analogy of Alice through the looking glass hiding behind a silk curtain (Carroll, 1871), talk of not supporting vaccinations was almost prohibited. There are some cases that demonstrate this as I outline below.

New Zealand RN Jennifer Scott’s license was suspended in February 2023. As per her statement: “All because I have openly criticised the jab” (Saunders, 2022, para

2). On February 18, 2023, Senator Paul questioned Johns Hopkins's University nursing dean, Dr. Szanton, about vaccination mandates for nursing students. Future nurses were suspended from studies unless they took mandatory Covid-19 mRNA vaccination. Some were working on Covid-19 wards, were previously infected, and believed they had a natural protection. As the senator noted: "... if you exclude everybody from being a nurse, who believes in basic immunology, you're gonna exclude a lot of smart people, people who believe that you can get immunity from both vaccination as well as infection, you are only gonna take the people who do as they're told" (Szanton, 2023, 1:00). Is that what we really want, nurses who are simply doing as they are told? Is our reality in sync with Noam Chomsky: "The educational system is supposed to train people to be obedient, conformist, not think too much, do what you're told, stay passive, don't raise any questions – that's basically what the system is about" (Rosa et al., 2015, p.168), since, as John Dewey concluded: "A society with too few independent thinkers is vulnerable to control by disturbed and opportunistic leaders". (Dewey, 1939, p. 62).

7.1.2 Nurses: 'Angels and swingers, matrons and sinners'

As the pandemic dragged on idealisations of heroes faded and frustration and anger replaced it, as Anderson et al., (2022) noted in this excerpt: "Voices of bewilderment and frustration... While we appreciate the sentiment of being marked as the heroes and angels of this global pandemic, these labels fail to recognise what we do or how we got here...Expert nurses are the product of years of professional development and skill acquisition" (para 3). We shifted from nurses being trained in a hospital of Florence Nightingale's time into health care professionals studying in academia. Nurses are expected to have at least a bachelor's degree, good computer knowledge, a never-ending smile, be competent enough to spot mistakes in patient's charts, diplomatic enough to question a doctor's orders, be able to change diapers and feed patients while facing emotional families, precisely calculate medication dosages, all the while supporting and advocating for the patient. They have the responsibility without the authority (Butler, 2022). As John Campbell said, we teach nurses to get an academic education, and then we expect them to do totally different work (Campbell, 2023a). The nurses are in limbo, without a clearly defined role in the system. They

can lose their license when a mistake is made. They can lose their license for asking questions. They can lose a patient when a mistake is made. Berger (2021) commented on the situation in health care systems: “Though they brim with fine words and caring mission statements, we all know they are rigid, unkind bureaucracies...In such authoritarian, often bullying regimes, the pressure to conform need only be explicit occasionally. Fear of censure, and fear of letting others down, will do the rest.” (Berger, 2021, p. 2). Nurses are expected to be angels, heroes, mothers, sex symbols, caregivers (Bellieni, 2020; Ferns & Chojnacka, 2005). And they are leaving...

7.2 The Israeli nurses' experience

The working conditions for nurses in Israel were summed up by Dianna (IL) who emphasizes the imperative for nurses to stay on the job: *“The commitment expected from the nurses to their job is not a commitment expected from anyone. Nurses cannot call in sick. In Israel, not only in my hospital, take a paracetamol and come to work.... We cannot stay home, there is nobody to replace us.”*

The duty of care, responsibility, and accountability is very strong and core to the hospital culture. Of course, it comes at a price; it required the nurses to constantly balance their personal needs against the needs of their patients. Table 7.1 lists the nurses interviewed. The nurse's views on the health care system, the process of volunteering, regulation and their views on how Israel managed the pandemic are outlined below.

Table 7-1: Registered Nurses in Israel

Name	Work area	Working experience	# vaccines	Covid-19 positive	Mother tongue	Military service
Maya	PICU / Pharma rep	0-5	3	Y x 2	Hebrew	Y
Kim	Covid-19 triage / Vaccination / Bone Marrow Transplantation	15 +	3	Y	English	Y, a civil duty for religious reasons
Dikla	PICU / Covid-19 pre- ICU	5-10	3	N	French	Y, active reservist
David	ICU/ Covid-19 ICU	5-10	1	Y	Hebrew	Y, active reservist
Dianna	Covid-19 ward / administrative	10-15	3	Y	Romanian	Y
Leanna	Covid-19 pre-ICU / Bone Marrow Transplantation (paediatric)	5-10	3	Y	Arabic	N, for Arab - Israelis army is voluntary
Katya	Orthopaedic / Pharma rep	0-5	3	Y x 2	Russian	Y

7.2.1 System reaction to Covid-19

Due to high number of Covid-19 positive patients, Israel utilized underground bomb shelters during the pandemic (Figure 7-10). Dikla (IL) described the largest Covid-19 underground hospital in Israel:

“In the second wave we went underground. Because everything is crazy in Israel, when the hospital was built, its parking lot was also prepared for war. It’s actually a shelter, it’s protected from bombs...So, it was three floors below the ground, and it was really interesting, because I think that the person that design it, wow, what a really nice job. Lots of things I can say about the normal hospital, but this was like wow, it had air-conditioning and ventilation everywhere, so we could breathe,

because you are there several hours and then patients are there for days and even weeks. Television everywhere and we did have showers and bathrooms, the hot water did not work all the time, but you have water. We had a delivery room underground, we had a surgery room, two of them even, not like a big one but for a small procedure you need to do.”



Figure 7-10: Underground Covid-19 hospital

David (IL) enjoyed working underground as well: *“...It was very convenient to work in a parking lot... most of my patients were intubated and sedated heavily, so they didn’t really care, or they did not really notice. They were laying on a bed, and we were standing on the floor of the parking lot... I must say they cleaned up the place really nice before they let us in.”*

Dianna (IL) noted how the health care system reacted, mentioning that it appeared to her that it was working more efficiently during the pandemic. The primary care improved, extra emergency clinics opened, less patients needed to go to the main hospital Emergency Room (ER).

“...we saw that the system can act and mobilize resources when it’s needed. And many things changed for better in the system. Much of the primary care in the

community was improved, education, training, emergency primary clinics were open, you did not need to go to the hospital to receive treatment for mild emergencies. And that happened like overnight, machinery was received very fast, things that we were asking forever to receive, all of sudden it appeared. So, we understood it is possible if there is something happening.”

Kim (IL) was stationed at an emergency primary care unit for Covid-19 positive patients, established to take the pressure off the hospital’s ER and to separate Covid-19 positive from the rest of the patient population. People needing medical attention, while in isolation due to Covid-19 positive tests, were not able to use personal or public transportation. They had to call an ambulance and were taken to those designated emergency clinics, where they were assessed by nurses and doctors in full PPE. Most patients were treated on the spot and send back home via ambulance.

7.2.2 Volunteering for the Covid-19 ward

As mentioned, out of seven Israeli nurses, five worked directly with Covid-19 patients, on designated wards or in the ‘underground mini hospitals’. The staff were asked to volunteer, but from the responses it seemed they felt they did not have a choice. The mixture of professional duty, a calling to help, and the difficulty in refusing when it came to saving lives, were an ever-present underlining theme. The stories show the unique predicaments nurses faced, especially in the beginning of the pandemic, when the nature of the virus was unknown. ‘Volunteering’ opened up ethical and moral questions. As Maya (IL), who refused to work with Covid-19 patients, said, *“I had to choose between my duty and what I believe in, and my family.”*

The experiences of these nurses were akin to that of a battlefield given the realities of the virus as outlined by David (IL) who worked with Covid-19 patients in ICU from February 2020 onwards:

“I never said, I do not want to go to Covid. I said I would prefer not to go. But I never said ‘no’. Nobody forced me to do it involuntarily. I was asked to go, so as a good soldier, I went. And it was, you know, it was kind of different at the

beginning...Most of the patients are actually, were actually, a lot easier to treat than in the ICU unit, which I came from, the regular ICU, because Covid is pretty straightforward. It's either you're going to go or you're not going to go. You die or not die. But basically, it's a respiratory disease. If you used to respiratory illnesses, it's not that big of an issue. Usually."

As mentioned, the army is an everyday reality in Israel. This is reflected in David (IL) calling himself a 'good soldier'. It is not an ironic statement. Soldiers are expected to follow orders. However, at the same time, Dikla (IL) had no problem questioning hospital authority, to make sure she understood what was required and what policies were in place. Her comments below illustrate this:

"So, they decided they will volunteer someone from each department, you know, it's like you are the chosen one. I was new in my department, and they told me: OK congratulations, you go to work with the Corona patients. I went to my boss, and I told her: OK, but tell me little bit about it.... can I go home after the shift, do I need to sleep in the hospital, because there were lot of rumours everywhere about it, and how do they think they will protect us with the information that they do have. And she was like "I don't know." And I am like, OK, listen, 'I don't know' is no good answer. She was not happy about it. At all. She was like "You need to be more flexible". Two days later she calls me to go to the hospital to sit there at a meeting... and it sounded like that the hospital did take everything seriously, and they will protect us with a lot of gear, and it sounded OK. You can go home, just take a shower at work, everything sounded OK."

Exceptions to these expectations 'to be flexible' and volunteer were made for special circumstances, such as pregnant nurses, and nurses with comorbidities. These nurses were deployed in non-Covid-19 departments as outlined by Dianna (IL), whose department was transformed into Covid-19 ward overnight.

"There were few that were told not to work at Covid, they were pregnant, or somebody with a chronic illness, or a child with a chronic condition or a family member. They were allowed not to work Covid. The rest, we just continued working where we were, just the department was now Covid."

Katya (IL) left the hospital before she could be asked to volunteer, voicing similar concern as Maya (IL): *“Hospital is a hierarchy, so if your manager doesn’t like you, and the person that does siddur avoda [shift planning] doesn’t like you, you’ll get the bad shifts, and so it is really important to behave and to do what you are told.”*

Leanna (IL) had a parallel view on the hierarchy and the role power within the structures of the hospital played in her ‘volunteering’: *“They were like, it’s your turn right now. We need you to go. Please and thank you. What am I supposed to do. I would have problems with the charge nurse, they could make my life challenging in this department, not get the shifts that I want and need. So, I went.”*

Kim (IL) volunteered, since she saw it as an opportunity for a change, given the burden of her current work: *“For one thing, I thought it would be interesting and a bit different. Bone marrow transplant is very difficult, and to take a break once in a while, is not a bad thing.”* But Kim (IL) also remembered her friend, Judy, who refused a second placement on the Covid-19 ward and was forced to leave the hospital. This story shows again that the hierarchical structure of the hospital may mean that department head nurses are too afraid to stand up to the hospital’s chief nurse. They would rather lose staff than to confront the management.

“There are people who left. Like Judy. She had extra training in epidemiology. So, they took her to the policy department to write policies about the whole situation. She did not want to go. And then they put her in ICU Corona. She hated it. She loves interacting with patients, that’s her strength. And all those ventilated patients were just not for her. And then she eventually come back to our ward, and when the next wave come and they wanted to take her again and the head nurse was scared to fight with the hospital chief nurse, to stand up for her, Judy quit. She just left. She had enough. She is a good nurse, and it is a waste”.

7.2.2.1 Challenges

Working in a different ward with staff from different areas had challenges. Dikla (IL) mentioned problems working with people she knew only in masks: *“I did not know a lot of people because I moved to the department when you are not supposed to eat together and sit together, you know, so you do not know anyone,*

because there was the distance, the social distance. I kind of work with people I do not know, it is difficult.” This was supported by findings in a study by Tsao et al. (2021), who argued that staff designated to Covid-19 areas had “dramatically impaired their social supportive network... the combination of reduced organic sustenance from familiar colleagues, and the added trauma of being involved in the care of numerous critically ill patients, was remarkable; we witnessed burnout and secondary traumatization rates significantly increased” (p.7).

There were also challenges working in an unknown environment as discussed in findings from Trotzky et al. (2023) and described by Leanna (IL). *“Those specific little things that are really super important in times of emergency, those were huge challenges to do my job well. It is hard when your patient is crashing, and you cannot locate the call button.”* On the other hand, Dianna (IL) experienced ‘camaraderie’ and ‘love’ in her departments, where workers knew each other from before Covid-19 times. Being in familiar surroundings with the same co-workers during the crisis was seen as beneficial in the academic literature (Bashkin et al., 2021). A blurring of the hierarchical lines, especially in a full PPE, were experienced as a positive development (Sperling, 2021a) and the interprofessional teamwork became crucial during the pandemic response (Michalec & Lamb, 2020), as experienced by Dianna (IL):

“The staff were together, supported each other, we did things together, everybody, doctors, nurses, nursing assistance, everybody got in, clean the floor, change the diaper, heated the soup, cleaned up after meals. Not like nurses is doing this this and doctor this and this. No, doctor would clean the toilet as well.”

7.2.3 How did we manage the pandemic in Israel?

Nurses discussed how they felt the country did in general. Dianna (IL) was non plussed with the pandemic itself. *“I think it was OK what Israel did. We did not have many casualties. They do call them casualties. It’s not casualties because nothing happened. Apart from an illness. We did not have that many deaths, and we took care of everybody.”*

David (IL) experienced the development of the treatment during Covid-19, he was at the front of the front line in ICU, received an opportunity to train at Extracorporeal Membrane Oxygenation [ECMO] treatment: *“There were no expenses saved to facilitate the treatment to all of Israel, to every single person, according to the best-known information that we had at the time. That was a work in progress. We learned, on the go, how to treat, how to take care.”*

Dikla (IL) had a similar experience on using a variety of treatments and new approaches:

“In Israel they did a lot of research, and they tried to give this and tried to give that. I do not remember all the names of the medicines we tried. But there was a study, and we gave this and then there was a study, and we gave that... we always changed the protocol with new studies. And I think that’s how you should do it, and from my feeling we were on top of it. Since things did change. The medicine always changes, life changes all the time and the things we knew two years ago are now different.”

The developing knowledge is seen in Dikla’s (IL) story. She worked in the Covid pre-ICU from February 202 and started her journey by describing her dilemma of working with the unknown deadly virus, the fear of infecting her family, of putting her immunocompromised father in danger, all the precautions she was taking in early 2020. She finished her story as a pregnant nurse in 2022, fighting the authorities to be allowed to stay working on the Covid-19 ward. She did her research, was confident there was no harm to her or her unborn baby, and acted accordingly, questioning the official policy prohibiting pregnant health care workers to treat Covid-19 positive patients. Nobody thought to change the original rule from 2020, until one determined nurse started asking questions.

On the other hand, Kim (IL) was disillusioned with the approach taken to the pandemic; she felt the restrictions should have been lifted as soon as knowledge of the virus improved:

“I think they did the best they could with the knowledge they had... there are not lots of death, the hospitals did not collapse. But I think mainly it is because medicine is really good and advanced in Israel, and they learned how to treat the hard cases of Covid early on. But I think Israel should have understood in the earlier stage what’s going on and stop some of the restrictions and some things that were implied were really harmful, like the vaccination passports.”

Israel had one of the highest rates of infection per capita in the world (Waitzberg & Davidovitch, 2021). The nurses’ voices show the picture from the ground, not the sensational news stories with dramatic headlines, as seen in social media or the mainstream. Their comments illustrate the reality of humans taking care of humans.

7.3 The New Zealand nurses’ experience

NZ did not experience the successive waves of the pandemic to the same extent as Israel. There were no special Covid-19 hospitals since enough space was available for infected patients to isolate on regular wards. Table 7.2 lists the nurses interviewed. The themes identified are similar to those noted for Israel; system reaction to Covid-19, volunteering for Covid-19 work, and how NZ performed as a country.

Table 7-2: Registered Nurses New Zealand

Name	Work area	Working experience	# vaccines	Covid positive	Mother tongue
Tamar	Paediatric/ vaccination	0-5	4	Y	English
Elis	ICU / Covid-19 ICU	5-10	4	Y	English
Anna	Clinic	10-15	3	N	Ukrainian
Lauren	Dialysis	15 +	3	N	English
Julie	Testing/ clinic	0-5	3	Y	English
Max	Testing/ clinic	5-10	2	N	English
Joy	ICU / Covid-19 ICU	5-10	3	N	English

7.3.1 System reaction to Covid-19

There were glitches reported in the initial reaction to the pandemic in New Zealand. Anna (NZ), a nursing manager for a private clinic in New Zealand, expressed her surprise over the disfunction of the system: *“the government did not leave any guidance or whatsoever for us, how to safely operate in the new Covid environment. Nothing. Zero guidance.”* Lauren (NZ) expressed similar surprise when the lockdown was put in place, and she saw no difference in her hospital:

“I walked into our unit, and we were just operating just as every day, you know, and I just kind of looked around and thought, I don't know, that I was going to have to go through a formal sign and sign out, maybe full personal protection gear... I walked in, and we're not doing anything. I spoke to our nursing staff at the time, and our doctors. ‘I don't think this is what we need to be doing, we need to step up, and our level of personal protection is not where it should be.’ We spend the rest of the day kind of debating, what we should do, because we didn't really have a lot of guidance from the organisation... we didn't have any guidance, not even a lot.”

Julie (NZ) said her job description simply changed, without warning. She had just received notification that she had passed her state nursing exams and just started her first nursing job. She was assigned to Polymerase Chain Reaction (PCR) testing:

“We were kind of thrown in this new thing, just doing swabbing. It was kind of crazy stuff. I find it hard because it really disrupted my orientation. It was all just very jumbled that’s what I am trying to say. My entry into nursing was all over the place.”

Elis (NZ), an ICU nurse, described the preparations on her unit, as a state of waiting for the storm: *“They tried to discharge as many patients as possible, and they stopped doing elective surgeries, which definitely freed up a lot of beds. So, at the lockdown, we were relatively free. We had lots of free beds.”*

7.3.2 Working with Covid-19 patients

Assignment to work with Covid-19 positive patients ‘just happened’. Joy (NZ) treated the first Covid-19 patient in NZ without training. The only information she was given was, *“Do not talk to the media.”* For the first patient, the son was isolated with his mother, he was not allowed to leave and go home. This gave the nurses the opportunity to bring what was needed for the patient to the door and let him assist his mother, the patient.

“I was sent to the respiratory ward to help out, I was taken aside, and you cannot talk to the media, yes, they have Covid. I had no training. I was just sent there and told not to talk to the media. We timed each other, it was yellow gown, N95, hair net, gloves and that was it. And it was dropping things, because the son was there with the patient, and we brought things and drop things in there, and then we’d come out and we stood back, because there were cameras so we could just push and see what they were doing. He was taking care of her; he was not allowed to go [home]. He was stuck there.”

Max (NZ), seeing what was happening around the world, volunteered to work at a centre designated to test people needing medical care, designed to keep the Covid-19 virus from the hospital. She reported an unusual pandemic experience, with

enough equipment, and enough staff to provide excellent care for people arriving at the community-based assessment centre.

“People phoned the triage, booked in the drive-through, two nurses went to each vehicle. We had two missions, one mission was PCR, and the other mission was, you know, a complete set of vital signs. A complete health check, and anyone that we were clinically worried about, we then had a full assessment centre. We had ventilators. We had defibs. We had an overflow morgue set up. We had social workers. We had occupational therapist, and we got administrative workers. We ended up being very much a social service, because what we quickly learned and realized was that people weren’t able to access health care in the way they had just days ago.”

Primary care was strengthened during the pandemic in both NZ and Israel, to assist hospital overcrowding. Nurses described positive experiences with this added service. Patients who were not afraid to seek medical help actually received a proper medical check-up, because the resources were there and ready. This unexpected side effect of health care system during pandemic will be further discussed in Chapter Eight.

7.3.3 How did we manage the pandemic in New Zealand?

Elis (NZ) saw the benefits of sealing off the borders and buying more time for the system.

“We were so lucky that we were able to take the Covid heat out for as long as we could...I think overall we really protected our vulnerable people. We felt so lucky to have two nurses to look after one patient, we were talking with colleagues about how we were pretty lucky.”

Similarly, Julie felt pride for her country’s achievements, even receiving compliments while traveling overseas:

“Everywhere I have been people commented on how New Zealand did things. I was really proud I was a Kiwi and I really felt we worked together, and it felt good, I live in such a united country.”

Anna (NZ) saw the negative aspects of the pandemic response; she argued the window of opportunity NZ earned by locking down and postponing the virus was not used wisely. She weighted up the capacities of NZ and concluded that it was necessary to lock down, given the limited resources available. She mentioned the missed opportunities of bringing nurses from overseas home, promoting 'zero Covid' work options for health care workers.

"I think that the first year, 2020, we did the right thing. I mean, we did the wrong thing in terms of that we were waiting until the last minute, but we did the right thing in terms of what we could do with the resources that we had... we earned a nine-month window of zero Covid. It's something that didn't happen anywhere, and I thought that was amazing achievement, and at the time I thought that it's worth the price that we are paying for it. But, however, my opinion completely shifted after I saw that nothing was achieved in this nine month, and there was no background preparation, because it was clear that Covid is not going away...I think that in the overall picture we did like, if I need to look at the overall effort, I think we did it poorly."

Anna (NZ) also mentioned being a mentor for nursing students at her clinic and seeing the effect on student nurses' study during lockdown and the impact this may have on future nurses. *"Imagine medical and nursing students on zoom, instead of seeing real patients... We are growing a generation of not sufficiently competent professionals. Our infrastructure is damaged beyond repair, it pains me to see, it took many years to build, and to see it kind of collapse. It is not, I do not like it, I hope we learned lessons."*

Julie (NZ) supported Anna's (NZ) feeling about being unprepared for entering the health care field: *"My primary health care placement was cut down from 6 weeks to three weeks. So, we got less clinical experience and then we needed to do like a project, like making a poster, which I did not feel like it gave the same the same sort of experience which clinical practice would."*

Max (NZ) argued that there was a missed opportunity for making nurses more visible in communication to the public about Covid-19 policies and the situation. The PM and Director General of Health discussed and explained the guidelines; however, the nurse was missing.

“I think initially, we did very well, as we prioritized population health, and that's how we ended up in in our lockdown arrangements. People will talk about the negative outcomes from the lockdowns, but they're so happy to dismiss the fact that it could have been worse had we not. The real work was happening, and I think we didn't do well to celebrate nurses and their time. I would have loved to have seen a stronger presence of nurses, in the communication to the public. We had our Prime Minister and the Director General of Health, who were our two people, that were the voices of Covid. I wish we had our chiefs up there. I think it was a really big, missed opportunity”.

As can be seen from these nurses' comments, while the case numbers were low in New Zealand in comparison to Israel, the experiences were similar. In both countries nurses expressed frustration, especially due to the inconsistency in official messaging. The illogical rules forced people to check daily what were the current restrictions. Lauren (NZ) described her patients calling her to ask what was allowed and what was required when the Pandemic Levels and Traffic Light Systems of advice changed.

7.4 The pandemic reality of nurses in IL and NZ

As mentioned, the stories of the nurses are comparable, as they are stories of a dysfunctional system lacking cohesion. While some health care organisations gave clear instructions and training, as reported by both Dikla (IL) and David (IL) from Israel, and by Max (NZ) and Elis (NZ) in NZ, other organisations left their workers to figure out what was needed during the war on the virus, as described by Anna (NZ):

“My boss, being a very entrepreneur kind of person, decided not to close, probably the only private place in the country. We decided to heavily restrict our activity, but remain open for these urgent patients, who are cancer diagnosis, and stuff like that.

We sat down, and looked at international data, just bits and pieces of information, to see what they are doing everywhere. And there were a lot of things happening overseas. And me, with my ties to Israel, I could easily just pick up the phone and say, hi, guys, what are you doing? And this is more or less, what we did. It was amazing. And we checked, collected some information from Internet, it was a long, sleepless weekend, that we put together the emergency Covid plan, which remains until today a very dynamic document, which we updated with every update that comes in terms of Covid.”

Across the globe, in Israel, Dianna (IL) described a similar experience of searching for information via friends abroad, when the hospital did not provide clear rules:

“We started research, we were the ones who made the policies, at least on the nursing level. So, at the beginning, even though we did not know, nobody knew, we were quite prepared, because we did the work, we did the research. We drafted the policies, the doctor, who is the head of the department, is very committed. We searched the Internet, following links of people we know abroad that were sharing information from their hospitals. We were like, all the time reading on the social media. Yah, it’s Israeli thinking. You network with your people.”

And the third option was to simply swim and adjust, as can be seen by stories of Joy (NZ) and Lauren (NZ), *“We really struggled to understand, what it was that we need to be doing in lockdown to protect people”* and Katya (IL), who bought masks on the black market, since there were none in her hospital.

In the first year of the pandemic, NZ nurses described waiting and hearing stories from overseas. Patients preferred to stay at home, scared to become infected in the hospital or not wanting to burden the system (Jordan et al., 2022; Schippers et al., 2022). Julie (NZ) described her reaction after a serious car accident. *“I never went to the hospital, there was not any medical thing done, no follow up, since obviously you do not want to go and use up, you know, the resources are scarce and those sorts of things.”* Max (NZ) had ideal working conditions in her drive-in testing clinic, having enough nurses on site, with all treatments running smoothly. This was a “unique”

opportunity of nurses having enough time to give to each patient, time to listen, time to care. *“What we did with a team of eight nurses on each day, when you look at what we achieved, it was pretty brilliant. So unique. It was absolutely brilliant. It was very cool.”* Joy (NZ) also reported good working conditions on Covid ICU: *“It was one-on-one nursing. One nurse and one patient.”* She also remembered patients being released as fast as possible during the start of the pandemic, which led to the reality of empty wards with waiting nurses.

Israel had a similar paradox of empty wards during the first wave, as mentioned by Kim (IL) and Maya (IL). My ward was emptied as well, Covid-19 was seen as a danger for immunosuppressed transplantation patients. Also, haematology oncology rooms are equipped with negative pressure, and it was expected the Covid-19 positive patients might overflow into those special rooms. It never happened. Everybody, who entered a hospital, was tested and all positive cases were sent to Covid-19 wards. Patients, who would normally be distributed to different hospital wards, were concentrated in one area, as noted by Dianna (IL) and discussed by Trotzky et al. (2023). Nurses in those Covid-19 departments experienced high workloads. Professor Krumholz, from Yale University, pointed out in his tweet on the pandemic effect: *“Where are all the patients with heart attacks and strokes? In more normal times, we never have so many empty beds”* (Jefferson et al., 2023, p. 5; Krumholz, 2020 [Tweet]). The system was clogged in one area with Covid-19 positive patients, while idle workers were waiting for patients in other areas.

At the same time Dikla (IL) worked in a pre-ICU ward and treated patients who were triaged not to receive ICU care. The resources were scarce and as such difficult decisions had to be made.

“The ICU wants the people, who they can help, and that can maybe survive. So, there is a decision, you know, you lose a bed in ICU, if you put the wrong patient there. And everyone knows how exp...expensive, yes, how much it is important to have a room in the ICU for someone who is young and can get out of it. And it's not.... if your grandma is 89 it's yah, and you have a 34-year-old woman or guy, the decisions

are bad, but you have to make some decisions. So, in our department lots of people just came and died.”

David (IL) experienced shortages of materials as well as personnel, and the necessary triage policies:

“With too many patients, during the third wave, there were so many patients that we were kind of on the brink of not having enough manpower(sic) to facilitate working, and at some point, we ran out of ECMO machines, there are not so many around. So, if you use all of them, we kind of run out of equipment and manpower (sic), if you ran out of manpower (sic), it’s no problem, every person works on more patients. The level of treatment goes down as you have more patients. That is the other part of the equation. But you can still treat them for life-threatening illnesses, with more patients that you used to, just the quality suffers. It’s debatable if that’s what kills or what or not. But it is what it is.”

ECMO (Extracorporeal membrane oxygenation), mentioned by David (IL) is a life support system that provides both cardiac and respiratory support to patients whose heart and lungs are unable to function adequately. It is a temporary intervention used in critical situations, such as severe respiratory failure or cardiac failure, where conventional treatments are insufficient. The decision to initiate ECMO is made based on the patient's clinical condition and the likelihood of recovery with this intervention. It is only managed in high level intensive care units. ECMO became the hallmark of Covid-19 intensive care. Yet its usage was controlled not for clinical reasons, but for what appears to be system related reasons. This was reflected by Anna (NZ) during the rising numbers of Covid-19 death in New Zealand in 2022: *“...you feel why the hell so many people are dying from Covid now, when there are so many medications available in the world, and the ECMO machines and all that. But we do not have staff to operate them.”* Her statement is supported by Joy (NZ), who worked in ICU: *“We didn’t use ECMO, it has a very strict criteria, which means that it would be very rare to put a Covid patient on it.”* On the other hand, David (IL) described his experience working with ECMO already in 2020: *“The ECMO machine could bridge the gap to the recovery and help. I can't say that it helps all of the time.*

But it assists different patients along the way, and it did show results along the way, even though it's very difficult to operate. It's got its own risks and benefits. It's highly expensive, highly expensive to operate.”

David's (IL) observation was supported by findings “Our preliminary data suggest that patients placed on ECMO with severe refractory respiratory or cardiac failure secondary to Covid-19 have a reasonable (55%) chance of survival.” (Hasan et al., 2021, p. 12) and other studies indicated the beneficial use of ECMO for Covid-19 patients (Furzan et al., 2022; Lorusso et al., 2021; Melnikov et al., 2021; Supady et al., 2022) We see a problem in a system, not in a staff shortage. If Israel with less nurses (as seen in Chapter 5) manages to train them to operate ECMO machines (Niv et al., 2022), and in NZ nurses cannot even give a vaccine without a lengthy training, there needs to be a system change. The resources are there, it would seem the trust in the ability of the nurses is missing.

As mentioned, NZ nurse needed training to give the vaccine. The required vaccinator training was described by Tamar (NZ):

“Even though you're working as a nurse, you can't just vaccinate. You have to become an authorized vaccinator. And the government came out with this incentive where they would allow nurses to do some study and you became a provisional authorized vaccinator, which meant you could give the Covid vaccine, and only the Covid vaccine, because we needed, you know, hundreds of people vaccinating and because the government was so eager to get everybody vaccinated, they had these huge incentives, for every vaccine that you did, whoever it was would get quite a large amount of money. That's why I did it.”

In Israel a nurse is allowed to vaccinate as a part of her licensing privileges. I participated in a voluntary two-hour Pfizer training in December 2020. We received information about the special mRNA vaccine, which does not require aspiration during application, and stays in the deltoid muscle. However, the majority of the nurses simply showed up for their shift and were vaccinated.

7.4.1 Training

During the pandemic nurses received special PPE training. Here are just two examples. From Israel, David (IL):

“My hospital made a special mandatory training session for all the staff, eight thousand people had to train to know how to put on the [PPE] suit! They had to be trained and sign off that they know how to do it. They had dressers, dressing nurses, which were supposed to inspect how you dress, and how you undress from the suits, I don’t know if it’s a job for a nurse, but nurses did that. And we had training days for how to work in the Covid department...”

From NZ, Joy (NZ) was less impressed by the information received during the training, feeling her pre-Covid-19 infectious control training was more detailed:

“We all had PPE training sessions how to don and doff. For me it was pretty much going back, because we got a boulder of training, and ours was more stringent and this was a lot less stringent, if that makes any sense.”

Elis (NZ) mentioned special training, such as proning patients, managing ventilators, and ICU training for non-ICU nurses. *“Obviously, we had lots of plans, and nurses from other areas had break-through training to come and help out if we had a big surge, but we were so lucky we did not need to use that.”* Across the globe, Dianna (IL) enjoyed her training sessions, finding them useful and professional.

“There were ongoing trainings. In the beginning, how to wear all the gear, and later on we received training in ventilation and respiratory treatments for Covid patients. That was very intensive and very professional. And I wish all my other trainings would have been so good.” However, Joy (NZ) was again not pleased with the extra trainings, fearing that the crash courses nurses received were not adequate.

“The only preparation was getting nurses trained up from wards to work in ICU, which was a computer course, like this is how we do things in ICU. Which a lot of us ICU staff were very uncomfortable with, because most ICU nurses have 5 years with training on the floor, before they are able to handle complex patients and to be given a Covid patient with proning that requires high pressure level from the ventilator,

cardiac arrhythmia, which they ordinary do not have, they are not skilled, is quite concerning.”

Julie (NZ) was also not satisfied with her nursing training, which was interrupted by the pandemic, and made her feel unprepared. A few kilometres away Max (NZ), experienced a different reality: *“We’re doing constant retraining, education every time new information came out. And then the Resuscitation Council put out new guidelines and, in the guidelines, you were to offer a video phone call to family before intubation. So, we knew, if you were intubated, your chance of survival from that point on was a pretty minimal.”*

7.4.2 Fear of infecting others

Waiting for the unknown was a general shared feeling in February 2020. Fear of infecting others was voiced by all nurses I spoke to. Not one of the fourteen nurses had concerns about themselves. Katya (IL), Maya (IL), Tamar (NZ) worried about their children. David (IL) described his approach to protecting his family: *“I was scared in the beginning for my kids. I took every precaution available. I took a shower before going home, sanitizing my hand. Everything very careful.”* Anna (NZ) echoed similar precautions: *“When I was coming home, I took off all my clothes in the garage, and I entered the house basically naked, and I took all precautions I thought necessary to protect my family.”* Leanna’s (IL) was worried about her parents, so she kept to herself: *“I would go straight to my room and take a shower and then make sure I did not feel any kind of symptoms. A couple of days passed without seeing my parents, because of this fear that I may infect them.”* Lauren (NZ) discussed her preparation, in case New Zealand entered high numbers of Covid-19 positive cases: *“I had plans, if we truly had a large Covid outbreak in our area, to live away from home, so that I wouldn’t be a potential contaminant for my family. I think most of us that I talk to get plans around that, if we were really in the thick of it.”*

Despite this fear of infecting family members, the nurses said they felt safe working in the hospital. Dikla (IL):

“As a person, who is working in a department without knowing anything about this new disease that kills a lot of people, I had the feeling I will be safe. I will be OK. We

have patients with diphtheria, it sucks too. And you have a lot of other cholerot [plural of 'cholera', slang for infectious diseases]. But with the Covid, I was in my ward, and I felt this is the most safe place for me. I know where the patients are. I am covered, I am protected. I know exactly where the patient is."

Max (NZ) explained similar feeling of safety, mentioning the paradox of health care workers, who, after taking off the PPE, were spending time together, without any safety measures.

"I was not scared; it probably comes down to confidence in PPE. Interestingly, though, when you look back, we work in PPE, and then come back, doffed our PPE, doing it all properly, and we had, you know, the carpet was covered in plastic, so that we could keep everything completely clean, and then in that common area, we were next to each other, breathing the same air, no masks, it was kind of crazy that we were in such close proximity to one another, without any precautions."

The nurses experienced the virus, worked with sick people, and lost their fear of the virus due to the knowledge and experience they had.

7.4.3 Pandemic regulations

The changing rules during pandemic were experienced by the public as well as by the health care workers. Nurses learned to navigate the guidelines, sometimes taking advantage of the loopholes. Katya (IL) was Covid-19 positive twice, however she decided to simply stay at home, without informing the authorities. The process of being released from official isolation was tedious and given she was vaccinated and had a green (vaccination) passport; she considered this enough. However, her daughter, an unvaccinated toddler, needed the paperwork to travel, *"My kid was Covid declared, but I was not. I did not want to go through the whole bureaucracy. I was not interested in playing the game. My kid was bureaucratically with Covid, since she needed the paper. I got the booster for the papers."* Due to an interesting spin in vaccination guidelines David (IL), a nurse working in Covid-19 ICU since the beginning of the pandemic, received only one Pfizer vaccine, *"The day I was*

supposed to get vaccinated, I got sick with Covid, so I missed my first vaccine, and because I was with Covid, I only got the booster few months afterwards, and that was it for me. I got one, just one, four months after I got sick and that's it." As per the official rule at that time, he could receive only one dose of Pfizer four to five months after being diagnosed as a Covid-19 positive. The next booster was available six months after the first dose, in David's case, after the finish of the Covid-19 vaccine mandate. As such, he had no 'official' need to receive second Pfizer.

Kim (IL) had an interesting story about the lack of synchronised policy between the hospital and the Ministry of Health, resulting in her enjoying paid sick leave: *"The Ministry of Health had one take on my situation and the hospital had another. I got a message somebody in my exercise class came out positive. And at that point, if you were not within 2-3m from a positive case, you were not in isolation. But being the responsible nurse, I reported it to my head nurse. I asked if they wanted me to come in, and she said first yes, and then she said no, the hospital epidemiologist does not want you to come, you need an isolation of 10 days, even though you are vaccinated. So basically, I did not go to work for 10 days, and since they decided it was a sick leave, I got paid. But since ministry of health said I do not need isolation, I was out and about, not in my house. I was in a hospital-imposed isolation."*

Maya (IL) voiced frustration with the policy changes and discrepancies. She felt the guidelines were not made to protect the workers and patients, but rather financially driven: *"All the time there were changes of policies and we did not trust the polices, because we felt it was more about money than for our protection or patient protection. First of all, it felt like no one had an idea, also the Government, also in the Health Department, they had no clue about what to do. In the beginning I felt like they're doing the best, because really don't know, they really trying, but then, especially in the hospital, it was clear to me that they don't care about the patients or the people. They only care about money. It's all about money"*.

Maya (IL)s also questioned the benefits of some rules, such as masking in Neonatal ICU: *"For me it was really hard to work with babies, and to know how important it is to look at facial expressions, for their development. It broke my heart."*

How will it affect them? When I saw a parent holding his baby without the mask, I couldn't, I didn't have the heart to tell him to put his mask on.” She broke the hospital and pandemic rules for what she believed was the best for her patients, knowing full well the consequences, such as a reprimand from the head nurse.

Cognitive dissonance created a tension between the message that the sacrifices people make are necessary and the belief that some of these behaviours may cause more harm than good (McGrath, 2017). Lauren’s (NZ) reflection questions the ethic of the vaccination rules:

“I think, with all of the best of intentions, we can look back on these things and say: Was that truly necessary? Did we actually have to go that far, were people dying without their family with them, were Mom and Dad’s dying without the adult children with them, and vice versa. You know, there were many cases in New Zealand where adult children wanted to come back for parents, who were dying, and they weren’t allowed entry into the country, where they were isolation facilities, and then missed being with the loved one, and I look back on that and think. Was it truly necessary? Did we need to be that strict and that hard, because at the end of the day, we went into lockdown, really, primarily, to support a hospital system.”

7.4.4 Impact of pandemic on families and nurses

One of the issues mentioned by most nurses was the impact of the virus policies on patient’s families. As described by Dianna (IL), the staff basically broke the official hospital Covid-19 policy and allowed relatives to visit:

“Our doctor, the head of the Covid department, he allowed the mother of the first dying patient to visit. And after he wrote a letter to the management of the hospital, ‘much appreciation from us, the staff and the family of the patient, that you allowed the visit’. He did it without asking. He just let the management know he did it in this ‘thank you letter’. They understood it was necessary and started allowing visitors.”

In Israel, David (IL), Dianna (IL) and Dikla (IL) reported that families were allowed to visit their sick relatives from April 2020, wearing protective gear upon

entering the Covid-19 wards. However, visitors were not allowed in NZ, as remembered by Lauren (NZ)

“My patients’ families found that incredibly difficult, not being allowed to visit. My patient, who ended up passing from Covid; at first, he was at ICU, then he got moved to a special Covid area, where visits were not allowed. It happened very quickly... and he consequently died, and his wife is still very much grieving, she feels the opportunity to be with him, it was taken away, and that nobody thought to tell her he was dying.”

Another story was about a wife, who could only stand at the door of her house to see the funeral car with her husband’s body passing by.

“An elderly gentleman passed here with Covid, and his wife was in a retirement village, was not allowed to go up to say goodbye, and they were not allowed to hold a funeral. So, when the funeral director was taking the body back to the funeral home, he rings her and said, if you stand at your gate of the retirement village, I will drive past, so you can see your husband... She stood at the gate and waited for him... how heart-breaking is that.... that’s brings me to tears, really. And do you know, she was so grateful for that, she was so grateful for that.”

Some patients could not have visitors, as Dianna (IL) explained, since the families were in isolation, and the lockdown rules made it difficult to travel. Dikla’s (IL) patients were surrounded by death. They were simply waiting for their own fate, terrified:

“I was a paramedic for 9 years. I am used to people dying, telling families their parents, child, brother died. This patient, this Covid positive engineer from somewhere, he probably never saw anything like that before, was just sitting there on his bed, watching us. Watching the women in next bed crashing, dying. Watching the man in another bed crashing, dying. Those patients had the same sickness, were on the same machines, they died.... I went to talk to him at the end of my shift and he said, I am scared. I asked him if he wants me to help him to put some movies on his

phone, so he can see something else, not just people dying. He said no. So, he was just sitting there, watching, breathing through his vapotherm machine.”

Even though Dikla (IL) said she is used to seeing dying people, she did later in the interview point out how the high mortality rate had a negative impact not only on the patients, but on the nurses as well:

“I had one shift.... that it was horrible. I was 3 hrs underground and I had 3 patients under my care that died... like each hour someone died, and then we are switching, you know, nurse comes, and she hears about your patients, and you go up, and 3 hrs later you came back, and hear about the same patients. So, three hours for her, nothing happened, and then I came, and 3 more dead. I was like for 12 hrs in the hospital and I was 6 hrs underground and 6 deaths from my 8 patients. And the other nurse was like, they were fine. Yes, they were fine, but they are not fine anymore, or maybe there are fine but someplace else... so we have shifts like that and sometimes it is your time, nothing happens, and the person after you or before you, are like ‘it was crazy’. It’s kind of a luck.”

7.4.5 Lockdown

Lockdowns were an unprecedented governmental measure and brought challenges. In Israel, strict lockdowns were instituted especially during religious holidays, time usually spent in large family gatherings. The rules were particularly tight during the first two lockdowns. As I mentioned, I felt being classed as essential and as such allowed to move around was a bonus, the same sentiment voiced by Kim (IL) *“I think, because I was a nurse and I could get out of the house, not like everybody else, my mental health may actually be better. Even though I was working with corona patients, I was getting out. And other people were stuck at home because there was the lockdown.”*

In Israel hospitals provided day care. Katya (IL) and Maya (IL), both with small children, worked part-time and therefore, under the hospital policy, did not qualify for this extra service. Both were able to balance their work schedule since their husbands were working from home. Kim (IL), a mother of nine children, voiced her opinion about depending on zoom lessons for education:

“And zoom was complete chaos. Sometimes it was, sometimes it wasn’t. When you start zoom classes for a 16yrs old kid at 10 at night it’s not the best. I mean, because the teacher has her own children at home, because they were not at school either and she cannot really teach and I understand that, but I do not understand how you expect 16 years. old to concentrate at 10 at night. Excuse me. Not if you want to keep them on schedule and to go to bed and wake up at the morning which was one of the other pieces of advice which the psychologist gave us trying to keep normal schedule and wake them up in the morning and get them dressed even though they are not going anywhere. You know normal day and you know you cannot. And it was very dissatisfying.”

Dianna (IL) talked about similar problems, trying to juggle her work and three teenagers, who did not qualify for the hospital camp. Three children home alone, without her being able to keep her phone on, while working in the Covid ward, worried they would not be able to reach her in a time of need. Returning home tired, she was unable to assist them much with zoom homework but was grateful for being able to bring home food provided in the hospital. David’s (IL) wife is an essential worker as well, so their life was even more challenging. He chose not to send his small children to the hospital’s day-care.

“We tried to coordinate our job and our shifts, so we could spend time with the kids. I took the night shifts, and she worked in the day. Usually about twelve I would start falling asleep, but still tried to maintain some level of consciousness, until she arrived. It was difficult, but we managed. And I got to work at night, and the cycle continues. It was difficult for the children, confined to a small space, they were basically indoors, with three hundred meters radius and then one hundred meters we could go outside and play on the grass. We got a lot of creative equipment, drawing boards and beads, kids’ stuff. In order to help them to pass the time as efficient as possible. It didn’t work all the time. But it helped in some cases. They are OK.”

Julie (NZ) felt her nursing education was affected, *“I was quite gutted because all of my classes ended up being online. I am a real in person learner, I like to ask questions, to be involved, and I think that with online it was more difficult for me to be*

motivated so I was sort of gutted about that.” Anna (NZ) voiced her frustration with the lost opportunity of lockdowns:

“When Covid came in full force, and we’re still at the same point that we were nine months ago, in terms of our preparation, I felt that my efforts were wasted, that the economy suffered for no reason... The economic damage but also the damage to people’s personal lives and tragedies and psychological trauma. And ICU dramas.”

For Maya (IL) the reality of lockdowns was very emotional, and the border restrictions were especially hard for her. Israel did not (with one week exception in January 2021) close its border to Israeli citizens. However, most countries did not accept non-citizens, and as such traveling was limited.

“The restrictions for going abroad, and they didn’t allow tourist to Israel, it was really scary. It kind of reminded me of before World War Two, when in Europe people started to feel something bad is going to happen, and some of the Jews left Europe, and the others stay, and many died in the Holocaust. I really related to the story, and also because my grandmother was a Holocaust survivor. That part of me, I don’t know if this is very heavy to mention here, but it really made me feel like it’s something apocalyptic, something really, really bad is going to happen, and there is no way to escape.”

She talked about her lonely grandmother, who was obediently home alone for the holidays, *“The government did lockdowns. My grandmother, who is ninety-two, lived alone, and she was really isolated, it was terrible for her...it was sad for me and for the children. We tried to make it normal, but it was not normal.”* For Jews the rules are complicated by the fact that the use of electricity is forbidden on Shabbat as well as during religious holidays. As such, zoom meetings or phone calls were not possible, leaving the elderly completely cut off (Melnikov et al., 2021). Warnings about the cost of loneliness on health care expenditure was voiced by Meisters et al (2021), however, this was pushed aside by governments in the name of the ‘greater good’. Then it became known that the Health Minister Litzman broke his own rules, attended group prayer services, then tested Covid positive, and forced the whole Israeli government into quarantine (Harounoff & Wecker, 2020). As Maya (IL) said

“I honestly celebrated without my family and he [Minister of Health] broke the rule, and that’s why I can’t stand him anymore, because we just kept hearing what the government did and what they were asking from us. I lost trust in the government”.

7.4.6 Vaccination mandates

In Israel unvaccinated health care workers were allowed to work, provided they took a PCR test twice weekly. Dianna (IL) saw no problems in the vaccination mandates. Her experience living in Eastern Europe prepared her for a life with restrictions, the new normal of Covid-19 era:

“Personally, I do not mind restrictions, I grow up in communist Romania, so restrictions are nothing new, and it was voluntary. I mean the restrictions were not for anything necessary, not something obligatory. It was for going to restaurants and going to shows and concerts. And no one asks you for it on the train or on the bus or for going to the hospital or going to the supermarket.”

On the other hand, Dikla (IL) saw the negative results of the mandates. The head nurses had to make the decision to send non-vaccinated, non-tested nurses home, or bend the rules in the name of having enough staff working.

“You could feel the pressure because they wanted the hospital to continue to work as smooth as possible, and the vaccine was the answer to that... but, every program has holes, not every boss was checking if all the nurses and doctors had vaccine or tests, you need people at work, so what do you do if they do not test, send them home? So, it did not work.”

Kim (IL), and Leanna (IL) discussed the problematic logic of vaccination mandates from an epidemiological point of view. Maya (IL) saw the harm it did to the unity of the population:

“I know people who lost their will to live because of tav yarok [green passport]. It was not fair, not human. All kinds of ways to try to make people get vaccinated or try to make people obey the rules. It turned groups of citizens against each other. It really hurt us as a community, it separated even inside families, made people enemies. We

hoped that vaccination will liberate us from all their restrictions. But it cost us the human rights.”

Max (NZ) saw similar divisions in NZ.

“I think we made a mistake with the vaccination mandate because that divided our country. Until that time, it was all about the team of five million, and we were doing well, being this crazy little island of five million. And then we turned on each other, there was suddenly, the Us. And if you were not on the team, you were ruining it for everyone, it got really nasty, and I don't think we needed to do that, because I truly think that even without mandating, given them a good enough reason, Kiwis just were quite happy to go and do.”

Lauren (NZ) expressed similar regrets on the divisions that arose within her community due to mandates:

“I am vaccinated, I had to be if I wanted to keep my job. It was particularly difficult when vaccination was being rolled out and staff, we lost a couple of staff in our area who refused to vaccinate, so they lost their jobs, and that happened really quickly. Once they had signalled to the organisation that they were not going to be vaccinated. They were removed from the workplace and lost their jobs really quickly.... I hope we don't go through that again. It was polarizing, and we perhaps lost a bit of our humanity around it. I do feel incredibly sorry for staff that lost the jobs. I don't think someone should have to lose the job potentially lose the house, lose their family income, because they choose not to have vaccination...It's heart-breaking to lose colleagues for the choices they make...”

The vaccination mandates also affected the patient-nurse relationship, as suggested by Magid (2020) in a study ‘*Treating anti-vax patients, a new occupational stressor*’. The discussion, if to treat unvaccinated patients, would be totally surreal in pre-Covid-19 times. In 2021 it became a reality (Newhub, 2021; Reznik, 2021; Fox, 2022; Magnavita et al., 2022;). The debates could be dividing, as Lauren (NZ) pointed out.

“Our patients were being screened whether they were vaccinated, and I felt that was a form of discrimination. What were we doing? They come to us for help... I think, I hope, we don't go through that again.... I'm wondering, you know, we're gonna look back on this time, and in fifty years' time say: Yeah, what were we thinking? What were we thinking?”

Anna (NZ) emphasised they never refused to treat unvaccinated patients:

“I just want to mention we did not enforce vaccinations on the patients. We saw patients regarding all the way through, regardless of their vaccination status. And this is why we purely went by symptoms screening and rat test. We, as a health care centre, did not discriminate. We feel it is wrong to discriminate patients on the basis of their vaccination. That's important for me to state”.

Again, the disconnect between a duty of care and the official guidelines is clear. The question was debated in the media as well as academic literature, should resources go to patients that choose not to vaccinate? (Parker, 2022). People do make lifestyle choices that directly influence their health status, such as smoking or unhealthy diet. Lauren (NZ) had more to share about this topic:

“Such a forced issue, it felt like we were taking choice away from people, really, and it was like we were saying, well, if you don't get vaccinated, you're not going to receive the health care that you need...there was resentment against unvaccinated patients. In fact, I was part of a conversation one day around, should we be refusing to see these people, that are not vaccinated, and you know we were polarized around that again, too. It's amazing that that kind of topic even came up, but it was floated. The idea was floated. Should we be refusing to see them? If they are unvaccinated and I was like... Why are we doing this? We all took an oath...it created an awful lot of debate around some really interesting things. I was very stuck, how to position myself in this. I'm not, I am pro- vaccination. But am I pro-forced vaccination? I'm not actually. I kind of have, I think, it's still a choice. There's lots of questions, and I don't think that...I mean, why did I get vaccinated? Because I didn't want to lose my job at the end of the day...so...am I really pro-vaccination?”

7.4.7 Appreciation

Initially one of the specific features of the pandemic was the appreciation for health care workers. Clapping for the nurses, gifts received on the wards, praise from the media for effort made by health workers. David (IL) viewed this gesture pragmatically, stating, *"Lots of homemade food arrived in the hospital... It was also a way to do stuff with the kids during lockdowns, to bake cakes for the Covid department. Sort of a two-birds-one-stone kind of situation."* Or, as Manthorpe et al. (2022) speculated, "the Clappers may have benefitted more than the Clapped" (p.4).

Dikla (IL) mentioned appreciation from management. She received a small pay rise for working on the Covid ward. Maya (IL) was less impressed: *"Well, all I got officially after the Covid as a nurse was an applause and I got a card with four hundred shekels."* [NZ\$170.00]. Leanna (IL), in a different hospital, felt similarly disappointed to receive a gift card equalling three hours of work: *"Recently we got a gift card for 270 shekels for health care workers. That's amazing be tachat she tedi lach [untranslatable...stick it up your....]. Only 270 shekels for all our stress, it's amazing uhhhhhh super amazing."*

In NZ there appeared to be no homemade food deliveries, gifts, or chocolates. One nurse, Elis (NZ) mentioned free parking for health care staff and Tamar (NZ) got extra pay as vaccinator: *"I got paid huge amounts. Because the government were like we need people to do this (vaccinating). We want to vaccinate as fast as possible you can work more than eight hours; you can work twelve. We made lots of money."*

Lauren (NZ) mentioned extra money being received in Auckland and the effect it had on the rest of the health care force:

"Nurses started to grumble about the lack of compensation for the extra, they were doing. Nurses in Auckland, who picked up extra got an extra payment, and then, as rest of the country became grumpy about that then ED and ICU got an extra payment, and the staff on my area was saying, well, hold on. I'm doing extra, too, because of Covid. I'm covering this because we've got no people. Why am I not getting an extra payment? I think that's all going on in an environment where people are tired and

burnt out. I think it just dissolves whatever kind of virtue you've got; it just dissolves it.”

In Israel nurses felt supported by the people. Grateful patients and their families, especially in the beginning of the pandemic. However, later reports on aggression and violence started to come through. People were expressing their annoyance with the never-ending rules and regulations, and nurses were the target on hand. NZ nurses did not reported gratitude from the public, it seems they experienced only the ugly side of the pandemic, frustrated patients, as mentioned by Julie (NZ): *“People were just being horrible, because we were offering opportunistic vaccinations... we had got this here leftover one, and I am totally fine if you politely decline but some people got really aggressive, we are forcing them. And I am just giving you an informed choice and you can say no. But they were so angry.”* Elis (NZ) and Lauren (NZ) described similar experiences.

Figure 7-11 and Figure 7-12 provide examples of homemade food delivered to the Covid-19 ward I worked in during 2020, at Tel Aviv hospital, accompanied by drawings and thank-you notes from children in lockdown.



Figure 7-11: *“You are like heroes for us”*



Figure 7-12: To staff on Covid ward thank you for saving lives.”

7.4.8 Covid-19 wards and hospitals

As mentioned, in Israel entire Covid-19 wards were needed, with a reallocation of health care professionals within the public sector, extra hours, cancelling vacations, together with recruitment of medical students and student nurses, use of military medical personal to assist with the pandemic, use of underground emergency contingency wards (Waitzberg et al., 2022). The pooling of nurses from different departments to Covid-19 wards was challenging. Nurses were shifted around hospitals. Special treatments were not done up to standard, as David (IL) mentioned, *“We couldn’t really take care of them properly, I am not an oncology nurse.”* A similar experience in NZ was reported by Joy (NZ): *“We’ve had pregnant ladies with Covid, they just went for a little bit of support, just to get them through the night and they go back to maternity. I know diddly squat about maternal health.”*

I, being originally from haemato-ontology and bone marrow transplantation, was selected to assist with giving convalescent plasma to Covid-19 positive patients (Figure 7-13). This method was discussed in the literature as a possible help to restart antibodies in immunocompromised patients (Bégin et al., 2021; Prudente et al., 2022). I tried to understand as much as possible about this procedure before I was faced with a terrified patient asking questions.

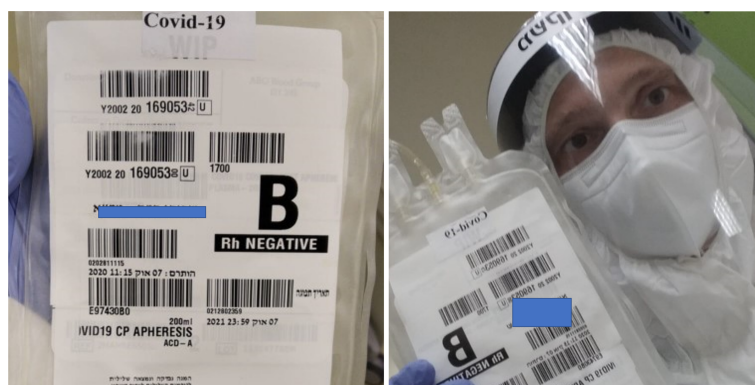


Figure 7-13: Convalescent plasma

The flood of studies, reports and medical advice in professional journals and public resources complicated efforts to establish precise and effective protocols for staff on the wards. The lack of clarity was reported from both Israel and New Zealand. Nurses described their frustration from the situation in the hospital, unclear directives, and contradictory policies, inconsistency. Joy (NZ): *“it was just drapes with duck tapes and zips to get in and out. And it was not really that good, the infection control in that hospital is terrible. It was a joke”*.

Lauren (NZ) experienced chaos in the system, when immunocompromised patients were receiving three primary doses of Covid-19 vaccines, but computer system knew only two primary doses, and listed the third one automatically as a booster. This created a problem when patients were asked to get a booster six months later. The computer refused to acknowledge the dose, and the solution was a prescription from the nurse. As Lauren (NZ) explained: *“I was prescribing something for a system problem...since the vaccines were not in the computer, I needed to give a prescription. For the computer. Not for the patient. I don't know, it felt odd.”* Three primary vaccines for immunocompromised patients are being used in NZ and Australia. I could not locate any studies supporting this policy. Pfizer’s own web site does not mention giving three doses within one month as being recommended (Pfizer, 2023).

7.5 Cognitive dissonance and future plans of the nurses

I had one question for all the nurses after listening to their stories. ‘What are your plans for the future?’ Of the seven New Zealand nurses, Lauren (NZ) continues working as a nurse, Max (NZ) moved to a hospital management, Elis (NZ) left for a nursing job in Australia, Tamar (NZ) is a part-time school nurse, Anna (NZ) is working in her clinic, and Julie (NZ) is traveling and volunteering around the world. Joy (NZ) is studying for a different, non-nursing, career: *“I would rather do nursing for what it is because I love it, I don’t want to hate it, so I want to get out before I turn cynical and horrible. I’m going to keep my registration, so I will work the bare minimum, because I cannot give it up.”*

Of the seven Israeli nurses interviewed, three are continuing with hospital work. For David (IL), the Covid-19 pandemic was an interesting learning experience, and he is finding post-Covid-19 work conditions much better. *“In Covid ICU I had three patients, maybe four (at a time) ... It was hard. We did a pretty impressive job. I am staying in ICU, it’s much easier than before”*. Kim (IL) does not do bed-side nursing anymore; she switched to oncology day treatments, stating fatigue as the main reason. Leanna (IL) is back in her pre-Covid-19 department: *“I am in paediatric bone marrow transplantation, I work with the kiddies, that’s where I want to work. I love it”*.

Dianna (IL) is working in hospital administration and does house calls with patients. She reported observing ‘silent leaving’, nurses stopping bed-side nursing and looking for a different career avenue:

“I see a lot of silent leaving. I do not think they are aware of the fact they are leaving. I do know about medical leaves, they could not work nightshifts anymore, after hours, or they could not lift patients because they have orthopaedic problems. Many, quite a lot of them. They stay in the profession but not in the same position. It may also be a burnout at home because it was a very stressful period for the families as well.”

Katya (IL) and Maya (IL) found work with pharmaceutical companies, both citing better life work balance outside of hospital, as well as the increase in pay and other benefits.

“I get more money for working less hard now. And when you work in a normal job, people do not speak to you like you are trash. It’s not normal to yell. In the hospital it is normal. It is a completely acceptable to not have time to eat or to go to the rest rooms...Especially during Covid, I could not choose when I am going to take a day off, even when I was sick, I was expected to work.”

Across the globe, Joy (NZ) expressed similar reason for leaving bed-side nursing. She felt that the treatment of nurses was poor, and the system expectations are too difficult to keep up with:

“I am trying to get out of health care for how New Zealand treats nurses, it is very bad. I think because our social norms around nursing are that we have a very set amount of nurse ratios, and we all were screaming that we’ve been under resourced, and nobody listens.”

Dikla ’s (IL) Covid-19 experience was hard, and as a result she is looking for a different job, outside of health care:

“The third wave when we were underground somewhere it impressed me and somehow it ruined me, and I think it’s one of the reasons I do not want to stay in this kind of job. I think a person can see several deaths in his life, but I think mine was little over the red line. So that’s why if you ask me if I want to stay in nursing, I would like to change it to something totally different, relaxed, without sick people. Without death.”

Julie (NZ) discussed her challenges with studying on zoom and making posters as a nursing student, instead of having hands-on experiences. She talked about working in “hot, sweaty PPE”, without any protection from the harsh weather, “There was no roof where we were and, in the rain, getting completely soaked, it was not the best. They sorted that one year later. They gave us a rain roof and umbrella”. She even mentioned, “My work was fortunately very supportive if I wanted to run out and

pee, they would have my back. But I know other places would not be so lucky". It is absurd that nurses in Israel (Maya, Katya) and NZ (Julie) are talking about being able, or not, to take a 'pee break'. Many nurses shared the opinion that the system was failing to look after them. While Joy (NZ) could bring her own umbrella to work, pandemic rules and regulations, including infection precautions, created obstacles to her doing so. Furthermore, as a new nurse trying to navigate the system, she waited for management to take care of her. As this failed to eventuate, she is taking a break from nursing, since *"I loved my job; I want to be a nurse, but I am really about the work and life balance and more about life."*

The initial fear of the unknown was reported in both countries. The major difference was the number of Covid-19 infections. In Israel, because of the large numbers of positive cases, many deaths were witnessed by Dikla (IL), *"I just saw too much death"*, and Dianna (IL), *"People dying, so many people dying. I want to forget them, and I cannot"*. The interviews were conducted in 2022, when the significant waves of Covid-19 in Israel were in the past and as such the nurses reported being 'used to' the virus, since *"it's just a virus"* (David, IL), *"it's normal, just normal virus"* (Leanna, IL). The fear was gone, and the virus was accepted as something they simply needed to live with.

In both countries, there was a clear paradox between hospitals with crisis guidelines in place and those experiencing a chaotic scrambling to figure out what was needed. Max (NZ) reported an abundance of staff and resources, while Anna (NZ) frantically searched for PPE just few kilometres away. Eyal (IL) and Kim (IL) registered good organization, while Dianna's (IL) department created its own policies. This points to missing or not applying crisis management plans. The year 2021, with vaccination mandates, brought further controversy. The discourse shifted, as discussed by Lauren (NZ), with nurses dismissed during a time of need, just when the Omicron wave of Covid-19 reached NZ. The nurses were interviewed during this time, when the health care system was starting to be stretched in NZ, while the government simultaneously lifted Covid-19 regulations. There was a dissonance from the situation seen in the hospitals and the official message of 'the pandemic is finished.'

In both countries a distinction can be made between nurses who felt they were making a difference, such as David (IL) and Max (NZ), both reporting satisfaction with the learning opportunities the pandemic provided. In contrast, other nurses described an increase in system distrust, as voiced by Maya (IL): *“I felt that I am neglected, I lost trust in the in hospital, in the Health Department, and everything. They expect me to work, but I didn't trust them, because they sent me to work, and I wasn't protected.”* This was reinforced by Anna (NZ), who reported being overwhelmed by the ground reality because of a lack of guidance: *“I am still finding it shocking, and it still goes up until today, that the government completely excluded us. And we were very exposed, and we basically were left to our own device....”* Dianna (IL) mentioned the system’s ability to mobilize, to rapidly re-organize: *“The money exists, and the ability exists. It is frustrating. To know it is possible, but it is not happening regularly. You need a catastrophe for the system to work.”* The strengthening at the primary care level, as experienced by Kim (IL) and Max (NZ) in their work in triage, demonstrated the system can be more efficient and patients can get faster quality care. However, triage arrangements in both countries were dismantled as soon as the Covid-19 wave eased, and the systems returned to the pre-pandemic mode with overflowing ER/ED and long waiting lines.

The feeling of ‘being let down’ by systemic pressure and failures by the powerful to adhere to rules, was expressed by most nurses. As Jenny (IL) commented, when it is convenient for the system, the pandemic regulations do not apply to the health care workers, since *“somebody needs to treat the people”*. Lauren (NZ) questioned the new biosecurity measures: *“Patient who’s dying. How are we increasing our Covid risk to allow during that twenty four-hour period the family to be with them. I don’t think it's right.”* Maya (IL) had similar questions: *“And then mothers, they tested Covid positive during a childbirth, and they couldn't meet their children, the babies were kept in PICU. And the mothers were at home. They just had a baby. The mother just had a baby and was not able to be with him. It's crazy. I cannot. I simply cannot”*.

Nurses reported mental health support being offered by their management, but the system seemed to be missing the target. David (IL) pragmatically commented:

“they [the management] went around asking if we are OK.... they could not replace us, so they asked all the time”. The nurses did not feel like caring, and empathy were projected sincerely by managers, as they felt these initiatives were implemented to keep them working. Dikla’s (IL) experience: *“I know a nurse, one day underground, she just had a severe panic attack”* and was taken for treatment and returned back to her post as soldiers are during a war. Dikla (IL) finished her story: *“I talked to my family. And now to you. My work did not know”*. Lauren (NZ) mentioned a similar sentiment of keeping her thoughts to herself, questioning what she saw and experienced, but not sharing with management. I was one of the few people she discussed her experience with: *“And I appreciate I can talk about this.”*

The possibility to talk was offered by the hospitals, however, as Joy (NZ) explained, to make an appointment was basically impossible, since nurses were on call, and keeping their meeting with a mental health worker would mean saying ‘no’ to a shift, basically letting down her short-staffed team to instead take care of herself. Lauren (NZ) saw staff who were suffering from burn-out: *“I have found ... some tired burnt-out staff, who, I can see are not offering care in the way that I think they would normally do. I feel, we lost the caring. We lost humanity.”* In a system whose main duty is to care for people, nurses kept working, their state unnoticed, as Dikla (IL) explained: *“I do not think anyone at work knew I spiralled out. I got into the car, I got into the hospital, I worked, I took everything off, I went, I showered, I went home, and everything was fine, I would say. So that was that.”* Her partner, also a health care worker, detected the situation and helped her arrange private counselling. The hospital, with ‘management asking are you OK’ did not notice her stress. The nurse was working, was saying she is ‘fine’, was functioning. And then Dikla (IL) simply left the health care system.

Dianna (IL) talked about support from colleagues and ‘love’ and ‘camaraderie’, but she realized the need for help and paid for a private mental health service:

“Either people left, who did not want to deal with this specific trauma, or there were people who avoided it. We did become even more cynical. It had an effect on us. I do

think there was a very quick expedited fatigue, not burnout, we lost compassion, when we needed to deal too much with things that need compassion.”

Across the globe Lauren (NZ) felt similar loss of humanity, loss of compassion, with one of the main core principles of nursing, ‘caring’, disappearing:

“We lost our caring. We lost our caring of our people, and I wonder, no matter how bad a pandemic gets, do we need to go to those lengths? I don't know, perhaps brains much more, you know, intelligent, than mine might be able to work that through. But I think we lost a human element here in this.”

Joy (NZ) agreed with this sentiment: *“Nursing is something that you go into because you love it, but we lost the passion...”* Between the demands of the system and the needs of the patient, the health care workers’ passion was slowly extracted.

7.5.1 The protection of sense making

I selected one story to illustrate the conflict nurses were facing, while trying to provide the best care for their patients. Sense making is a coping mechanism during crisis (Stephens et al., 2020). When things stop making sense, moral distress can develop. With prolonged exposure to moral distress, ‘long-term emotional scarring’ can become permanent. (Cartolovny et al., 2021). Sense making is possible with adequate knowledge, formed by information, experience, and constructive discussion. Knowledge as a protective tool was mentioned in findings from my scoping review, as well as in interviews.

7.5.1.1 *She tried to tell me...*

Lauren (NZ) searched for information, after one of her patients asked her a question. The development of the story is important for understanding of the situation of nurses in the pandemic field:

“I had a patient, and she got vaccinated, and ... she had not had a period for six weeks, and she thought it was because of the vaccination. I said, oh, no, I've not heard of anything about that. Let's do pregnancy checks, ... and she wasn't, we checked twice serum and on stick, and then it took eight weeks to have a next period. That was

*incredibly irregular and different from normal period. I started googling if more women were experiencing this, and I saw nothing in the medical literature but lots of online chats around woman saying something's going on here, they either lost periods or that it very irregular. And so, I know actually, I read today about at Washington post article on, it's now been proven that it's, you know, to woman's kind of I mean problems with fertility cycles. **And I thought she tried to tell me that, I thought about my patient. She tried to tell me.** That's what she thought was the problem, and it's not that she thought there was a problem and not that I didn't believe her. We just didn't hear about it. I started talking to all of my medical colleagues about it, they were saying, Oh, no, no, it's not. I was saying to them, I've found a few things online. This is happening to a lot of women. It's not just this one patient. It was interesting.”*

Reports on menstruation problems were circling on social media in Israel already in February 2021 (Bridle, 2021). Jewish religious women must go to mikvah, the cleansing bath, after menstruation. The mikvah attendants started seeing irregular visits from women. They reported these puzzling observations to religious leaders. The issue became so widespread the Rabbinical Court in New York recommended no more vaccination for women, fearing fertility issues. The decree was not officially accepted and was disputed by other religious leaders. Dr Peter McCullough testified about the vaccines in this court together with Dr Jessica Rose, who discussed the statistics from Vaccine Adverse Event Reporting System (VAERS) on the reports on fertility and menstrual cycle (Thorp et al., 2022).

Dr Guetzkow, lecturer from Hebrew University Jerusalem, posted on February 19, 2022, in his blog a translation from an analysis of Israeli MoH survey, released on their official Hebrew Telegram channel. “Nearly 10% of women under the age of 54 had disruptions to their menstrual cycle after the booster... About half of those women reported that the problems persisted at the time of a follow-up interview, which was anywhere from 10-16 weeks after vaccination” (Guetzkow, 2022, para 6.). The unofficial reports from blogs and substack slowly reached news articles and peer reviewed journals, with findings consistent with the unscientific, anecdotal observations (Castruita et al., 2023; Kildegaard et al., 2022; Rage, 2022; Shir-Raz, 2022b). A meta-analysis study by Blix et al. (2023) supported Lauren’s (NZ) findings.

Lauren (NZ) did not receive official information from her hospital, MoH or her nursing association. She took her patient's concerns seriously and looked for the data in the old-fashioned way, searching in peer reviewed literature and finding nothing. She discovered on social media groups of women, reporting the same problems. What should she do? Nurses are facing those complex realities, being caught between patient's needs and the system demands, between the duty of care and the official lines within which it is allowed to do so.

7.5.2 Summary

The stories from nurses were different and similar at the same time. A common theme in both countries was an experience of working professionals who were also balancing family responsibilities, parenthood as well as care of elderly parents. A prominent concern was their duty to patients and to themselves. This is especially visible in stories about 'volunteering' for working with Covid-19 patients, followed by an overview of the three pandemic years from their own perspective.

Themes similar for both countries, such as frustration with the system and pandemic realities, especially fear, PPE training, the death toll, lockdowns, and mental health support, were summarized and examined together. Interestingly, no nurse chose to implement the mental health help offered by their organisations. Two Israeli nurses paid for private services rather than use the free official assistance provided. Five out of seven Israeli nurses treated Covid-19 patients directly. One nurse from NZ had experience treating Covid-19 patients in ICU, while two nurses were stationed at testing drive-through clinics, where every patient was potentially Covid-19 positive. The stories talk about pride for work well done, as well as questioning the efficiency of the system and the handling of the emergency. Future plans of the nurses were reported.

The Covid-19 time was challenging for nurses across the globe. The story of fear, of balancing duty and selfcare, is similar in both Israel and NZ. Ethical and moral questions, the need to care, to learn and improve as well as the despair of feeling used, misused, and not being heard, is clearly expressed. The research question: What are the experiences of nurses working during the Covid-19 pandemic, and how were they

supported? was somehow answered. The experiences were discussed, while the support from the public was mentioned from Israeli participants, the system tools were not utilized by the nurses. This could be due to a distrust in the system, as mentioned by interviewers from both countries. This will be investigated further in the following chapters.

Chapter Eight: No Answers, Just Questions

“This is a story from my trenches. About the consequences that were made on much higher level... enforcing those guidelines and rules, and it was difficult, and it was polarizing, and it is still not over. We did many things we were not supposed to do.” (Lauren, NZ)

In this chapter, I reflect on my study. I ask, have I answered the question I initially posed: **What are the experiences of nurses working in the pandemic, and how were they supported?** In addressing this question, I have organised this chapter as follows. Firstly, I outline the important points from each chapter and indicate how they contributed to the overall argument and address in detail the findings from the study linking these to Foucault’s biopolitics, governmentality, regimes of truth, forced silence and the surveillance panopticon. I next detail the outcomes of this regime on nurses. This is followed by a discussion of the WHO Pandemic Treaty in relation to nurses and their capacity to make clinical decisions based on their expertise and knowledge, since it is related to my research question. WHO proposed the increase of power over sovereignty by calling for all countries to sign a treaty whereby they would control the countries’ decision-making processes and their management of any future health crisis. As Dr. Simon Elmer noted recently in his lecture: ‘The four horsemen of the apocalypse: New technologies of biopower’ (Panda, 2023), the new emerging plan is to implement four regulatory apparatus, namely Digital Identity, the UN agenda 2030, the WHO Pandemic Treaty and Central Bank Digital Currency. An absolute control proposed by the WHO not only challenges the sovereignty of countries but precludes the clinical and experiential knowledge of health professionals and researchers. It effectively stops diversity of opinion, knowledge, and research. As the New Zealand new government indicated, they will not sign this treaty, contrary to Israel, who are proposing to do so (Neilson, M, 2023; Fenigson, 2023). It is important to discuss the enactment of this ‘one health’ global plan, and especially reflect on the needs of nurses, as seen during Covid-19 pandemic. I will also highlight the limitations of my work and make recommendations for the way forward.

In 2020 Covid-19 took over the world and I, working as a nurse in Israel, had the front seat in this experience. When examining the development of the pandemic and the academic literature, I noted that the Covid-19 era sparked a diverse range of emotions and reactions, encompassing the evolving narratives of Covid-19, the functions of metaphors in pandemic discourse, linguistic landscapes, and the various ways Covid-19 was framed in the media. The discourses identified in these studies highlighted the significance of language and communication in shaping public understanding, policy responses, and societal attitudes towards the pandemic. This view is consistent with the findings in my study. The discourses encompass issues related to power dynamics, social inequalities, public health messaging, political communication, and the use of language in crisis communication.

As both Fairclough and Foucault contend, the analysis of discourses provides valuable insights into the societal, political, and cultural implications on a topic, in this case, the pandemic. This contributes to a deeper understanding of the complex interplay between language, power, and crisis communication. What was clear throughout this study was the control that governments exerted over their people. In the pandemic narratives, political control over what people could do, where they could go and how they worked, conducted their lives, and even accessed health care, was strictly controlled through bio surveillance, such as mandatory isolation, phone tracking, quarantine measures, public lockdowns and vaccination mandates.

To begin this exploration in Chapter One I provided background to the pandemic and situated my position as a nurse directly involved in working in hospitals during Covid-19 in Israel. I outlined the emerging discrepancies, which led me to question the official policy lines. My research is the story of nurses, the voiceless participants of the war on the virus.

In presenting the health systems in both countries in Chapter Two, I noted that Israel has one of the lowest number of nurses in the OECD (6 to 1000), while NZ has one of the highest (11.5 to 1000). According to WHO, 'healthy life expectancy' in Israel is 72.4 compared to 70.2 in New Zealand (WHO, 2023c). Since my thesis is Covid-19 related, I examined the excess death statistics during the pandemic years, as

reported by Ioannidis, Zonta and Levitt (2023b). Excess death calculates how many extra people died compared to an average year. It is one of the tools used to discuss the effects of the Covid-19 on the population. It is assumed that during a pandemic, there would be a higher number of deaths in the population. However, Israel and New Zealand are side by side with excess death numbers, even though their Covid-19 experience, especially during the first year of the pandemic, was dramatically different (see Appendix 4). The Covid-19 virus affected older people more, and as such the excess death rate in Israel of people over 65 years old increased to +2.2%, mirroring the three big waves of Covid-19 during 2020/21, while in NZ excess death in this age cohort was significantly lower, -3.6%. However, the excess death for under 65 years old in both countries was similar, -2.7% and -2.3% in NZ and Israel, respectively. This is explained by experts as a side-effect of lockdowns, where less traffic and work accidents occurred resulting in fewer presentations in emergency departments. The data for children of 0-14 years is interesting, where in NZ reported a slight decrease of -2.9%, however Israel has marked difference of -15.5%. It seems Zoom classrooms protected children against sport and traffic accidents. Based on the available data, I speculated that a lower number of nurses in Israel had no significant impact on healthy life expectancy or even on excess deaths during pandemic.

Both countries utilized armed soldiers for guarding people in quarantine hotels. This unique 'bio sociality' (Foucault & Rabinow, 1984) established a place where 'the others', united by diagnosis or just a suspicion of a possible infection, lived separately from the rest of the population. In New Zealand, Managed Isolation and Quarantine (MIQ) was mandatory for New Zealanders who received permission to re-enter their own country (Gray et al., 2022). In Israel there were hotels for recovery, and for isolation. For nurses working in these areas, the lack of contact with patients totally annulled any idea of 'holistic' patient care, compassion and connection were not possible.

8.1 Polemos Epidemios [war on people]

In Chapters Three I discussed my methodology. Critical Social Theory (CST) underpinned this study because it provided a sound framework upon which to explore the complexity of discourses that occurred during the pandemic. CST helped to uncover social, economic and political dimensions of the pandemic as a global crisis. Using a case study of two countries, I applied a Critical Discourse Analysis (CDA) to examine the inequalities that emerged because of the confusing messages and debates, alongside the control of freedom that was imposed on populations. Using Foucault's genealogy, I was able to map the epoch of the pandemic across the three years to see what influenced the discourse and when this occurred. It afforded the use of Foucault's view on power and how powerful people control knowledge, drawing in biopolitics and governmentality to understand both the application of control and its effects on social, economic and political discursive shifts. This knowledge enabled me to listen to the nurses as participants from the two countries and to retell the stories of their experiences during the pandemic and what supports they were provided with during the three years. The discourse also included social networks freely available on the world wide web. I trawl Twitter looking for an alternative to mainstream narratives from scientists, health professionals and other interested parties, which provide me with insights into the power in and against the pandemic's control as it unfolded over time.

In Chapter Four I outlined the methods used. As a framework for analysis, I applied the 'cake' model of acquiring knowledge (Eysenbach, 2020), which explains how the "up and down" flow of E-health literacy was experienced during the pandemic. Each cake layer influenced the others; information disseminates in each layer vertically, then the information flows horizontally, from science to social media, and back again, which illustrates how has the discourse of pandemic changed over the last three years. This understanding is important, especially given the WHO Infodemic management suggestions of curtailing information (Calleja et al., 2021; Tangcharoensathien et al., 2020).

8.2 What were the experiences of nurses during the pandemic?

Chapter Five provides a scoping review of literature, gives a comparison of how nurses in Israel and New Zealand coped with the impact of the pandemic. The retrieved research papers focused on issues of anxiety, stress, and burnout in the nursing workforce in both countries. However, the topics and quantity of studies differed between Israel and New Zealand with the weighting towards Israel. A reflection of the Covid-19 cases numbers, deaths, and geographical position of both countries was done, with the major themes being the place of knowledge as a protective tool, policy adjustments to the crisis, nurses depression, stress, anxiety as well as coping, resilience, and satisfaction. Ethical and moral questions relevant to the pandemic were raised and country specific topics, such as issues of leadership and the position of Māori and Pasifika in NZ, the intensity of work on Covid-19 wards and the highly successful vaccination drive in Israel.

As findings from the Literature Review suggested, there were warnings about the increase in stress, anxiety, and burnout in nurses due to the Covid-19 pandemic. The mental health distress of health care workers was evident and recommendations for support and counselling were offered (Savitsky et al., 2020; Bashkin et al., 2021; Dopelt et al., 2021; Goldfarb et al., 2021). The disconnect between duty of care and selfcare, moral questions about personal safety, ethical questions of patient's triage limited by available resources, were all discussed in the academic literature. Duty of care was emphasised together with the need for a utilitarian approach (Sperling, 2021a). Growth and leadership opportunities brought about by the pandemic in NZ were discussed (Hughes, 2020; Cook et al., 2021; Davis et al., Thompson et al., 2022). For example, Māori nurses stepped in to care for their community, and provided education and guidance in the chaotic time of always changing regulations (Clark et al., 2021).

8.2.1 The picture of the nurse in peer reviewed literature

Nurses reported PPE shortages in both Israel and New Zealand highlighting their lack of protection and the fact that they were torn between their work and the safety of themselves and their families (Barratt et al., 2020; Battista et al., 2020;

Savitsky et al., 2020). Sperling's survey (2021a) of healthcare workers in Israeli hospitals revealed a third of respondents feared going to work due to the perceived high risk and inadequate protection. In Israel, Dopelt et al. (2022) predicted that the toll on health workers would last long after the pandemic had gone, noting that nurses became the subject of abuse and violence from 'pandemic fatigued' patients. The academic literature recognised early on that those combating the virus would require specialized mental health assistance (Buchan & Catton, 2020; Hertel, 2020; McClunie-Trust, 2020; NZNO, 2020; Solnica et al., 2020b).

Ostracism from society, feeling guilty when infected, while at the same time being proud of work well done, are reflected in studies from both countries (Savitsky et al., 2021; Sperling, 2021a; Clark et al., Harr & Mowat, 2022). A topic not discussed in detail in the literature, but relevant, was the use of health care workers in Israel to test vaccine efficiency (Amit et al., 2021; Haas et al., 2021; Regev-Yochay et al., 2021; Shitrit et al., 2021b). How much this participation was voluntary or not, is not addressed. Nor do we know what nurses felt about being a part of a huge worldwide experiment, and if they even believed this alternate narrative or not. What we do know is that nurses worked overtime, looking after patients with little additional remuneration. In Israel this included working extra shifts and vaccinating a significant number of the population in a record time (Rosen et al., 2021). In summary, the review of the literature highlighted the burden nurses carried during the pandemic as they cared for patients, and the stress this generated. This stress and anxiety were exacerbated by the lack of preparedness in both countries, and by shifts in official information.

Within the public sector, health care professionals were relocated, while extra hours, cancelling leave, and recruitment of medical students and student nurses was organized (Waitzberg et al., 2022). The pooling of nurses from different departments to Covid-19 wards was challenging, as was discussed in details in Chapter Seven. Telemedicine was utilized. As Dr Galia Barkai explained from the first virtual hospital in Israel, "we transformed all 200 outpatient clinics to video clinics and finished year 2020 with more than 60,000 video visits" (Sheba, 2021, para 2). Virtual family visits were organized for Covid-19 wards, but soon it was understood that

“digital visiting hours” were not enough and visitors in full PPE were allowed in the hospitals (Pilosoph et al., 2021, p.18), as experienced and described by Israeli nurses.

During my fieldwork my questions widened. I realized that moral injury born out of pandemic regulations was the primary problem for nurses during Covid-19 era, and not ‘merely’ depression, anxiety and stress. One cannot deny the existence of stress in the lives of the nurses, but a more important issue was the cognitive dissonance, brought upon them by the ever-changing rules. It would appear that this may have precipitated a nursing exodus.

8.3 Digging in the tell of the pandemic

Adopting Foucault’s archaeology and genealogy in Chapter Six, I was able to go back in time, looking for what happened during the three years of the pandemic. I found significant discourse at all layers of policy, decision making and practice. Everywhere the important element of nursing, the patient care, was missing. We lost the human being and with that we lost humanity. Archaeology investigates ‘what’ happened, while genealogy processes and connects the snapshots from the past into a tree, looking at ‘how’ the findings are interconnected. Seeing the pandemic tree, I started to search for Agamben’s formula, the ‘why’ in the tree construction. I questioned the dominant narrative, ‘the only truth’, by looking at the reality through a different lens, the one of dissent during the pandemic time. By comparing the official and the non-official story I was trying to make sense of what happened, how it happened and why the system needs to be fixed to assist the morally injured nurse. To reform the system, we need to know why, where, and how it is broken.

On a global view, what I found was an increasing loss of trust in governments, alongside confusing and discursive narratives about the way the pandemic was managed, and how people viewed the pandemic. The new paradigm of biosecurity changed the notion of citizenship, where people of a sovereign state became the passive object of care, control, and suspicion of all kinds. The pandemic has shown without doubt, that the citizen is reduced to his (sic) naked biological existence (Agamben, 2020a). The term ‘epidemic’ is a combination of epi (on) and demos

(people), first used by Homer in *Odyssey* as ‘Polemos Epidemios’, meaning ‘war on people’, ‘civil war’. Hippocrates was the first to use ‘epidemios’ as a group of syndromes that circulate in people (Agamben, 2020a). “It is not surprising that for the virus one speaks of war. The emergency measures obligate us in fact to life in conditions of curfew. But a war with an invisible enemy that can lurk in every other person is the most absurd of wars. It is, in reality, a civil war. The enemy is not outside, it is within us.” (Agamben, 2020, para 6). Although governments likened the management of the pandemic to a war against a virus, it effectively alienated the populations as well. It asked and demanded from the citizens to spy on each other. And in the middle of this muddle, were nurses trying to care for patients.

In Chapter Seven I report on my interviews with nurses from Israel and New Zealand. The analysis of their stories showed differences in the way the pandemic experience was in terms of lockdown, isolation controls, and the impact of the virus itself, but the similarities related to the confusion of policy, the lack of communication and support they received. In both countries, nurses had directives that changed often. Both groups of nurses described how they made their own way through the confusion, identifying their need to ensure that care was always the best they could provide. Although they receive accolades from patients, they were also at the front end of the anger and the frustration from patients and their families, who were provided with little information about the virus, other than to stay at home and wait for symptoms. Commonly across both countries fear of contracting the virus and taking it home to their families, was very stressful. Disappointment in their leaders was evident. Nurses found the decision of vaccination mandates illogical. All the cakes from patients and the recommendations from the WHO ‘to look after’ the nurses were merely symbolic and provided no solace to nurses working beyond ‘the call of duty’. In both countries, nurses described moral, physical and psychological distress in how their work was managed by those in control (both at organisational and national level). This control directly impacted the nurses’ capacity to care, leaving them professionally vulnerable and their patients dangerously clinically, emotionally and physically at risk.

8.3.1 Nurses during the ‘state of exception’

In this next section, I discuss the elements of the pandemic that have directly impacted on nurses and nursing work. I firstly pick up on the issues of vaccinations and mask wearing as two concrete manifestations of the contradictions. I follow this up by detailing the specific impacts on the nursing profession, coping with stress, staff shortages, attrition, the loss of trust and moral injury. Drawing on Foucault and Fairclough’s terminology I next demonstrate the battle for trust; regimes of truth, forced silence, and surveillance and the power of the panopticon endured by nurses and the general public. This approach allows me, as noted in Chapter Four, to illustrate the discrepancies between the official narrative and the situation on the ground using the framework of the ‘cake’ layer model (Eysenbach, 2020; Gallotti et al., 2020; Tangcharoensathien et al., 2020; Tsao et al., 2021). In taking this approach I move between what was happening with the flow of information from its various sources; social media, e-news, academic literature and government mandates to individual nurses; from the micro to the meso and the macro and back again. In the final section I raise the current ‘one health’ proposals of the WHO, make recommendations for the future, and outline the limitations of the study.

8.3.1.1 *Vaccinations*

Vaccinations were commenced several months after the beginning of pandemic in Israel and several months after that in New Zealand. Some health care workers argued that they did not need to be vaccinated due to their previous Covid-19 positive status (Kheriaty, 2022; Kheriaty, 2023a). Since 2020 social media discussions, pre-prints and peer review studies are arguing that natural immunity provides a better protection than a vaccine (Gazit et al., 2021; Gazit et al., 2022; Pilz & Ioannidis, 2022; Stein et al., 2023). However, essential workers, who were infected with Covid-19 in 2020 and refused to vaccinate, claiming natural immunity, were facing losing jobs, as reported by NZ mass media ‘Hospitals remove hordes of anti-vax workers who defied mandate’ (Campanile et al., 2021). Dr Jonnie Girouard was fined \$300 for treating patients while unvaccinated and her registration was withdrawn (Wall & Broughton, 2022). On August 25, 2021, preprint ‘Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus

breakthrough infections' (Gazit et al., 2021) concluded the natural immunity offers stronger protection against Covid-19 infection and symptomatic disease. This Israeli study was supported by findings from South Africa (Kimball, 2021; Wolter et al., 2022). Five months after issuing a statement that vaccine immunity protects against Covid-19 better than natural immunity, CDC published a report showing the opposite is true (Charbonneau, 2022). On April 5, 2022, the Israeli preprint about superiority of natural immunity was peer review and published in a journal of Clinical Infectious Diseases. (Gazit et al., 2022). Those findings were supported by other studies (Pilz & Ioannidis, 2022; Stein et al., 2023). At the time of writing this chapter, health care workers who lost their job by refusing the vaccine, are still not being re-imbursed for their lost wages, even though the evidence suggest their arguments were justified.

8.3.1.2 *Infodemic*

As mentioned, already in February 2020 the WHO alerted the international community of an “infodemic” plaguing the world (Zorocostas, 2020). In April 2020, WHO released a report ‘Managing the Covid-19 infodemic: A call to action’, declaring that Covid-19 virus was accompanied by massive spread of ‘infodemic’ (WHO, 2020). UN Secretary General Antonio Guterres Tweeted: “a tsunami of misinformation, scapegoating and scaremongering, had been unleashed” (Guterres, 2020 [Tweet]). Dr Tedros, WHO director general, asked all relevant stakeholders to increase their efforts to promote facts and science as the main way to counter the problems of misinformation. Social media companies were required to take action to address the Covid-19 infodemic (Bhattacharya, 2022c; Elisha et al., 2022; Shir-Raz et al., 2022) as well as search engines were instructed to monitor the traffic on their sites. (Kheriaty, 2023).

The one resilience tool mentioned in academic literature and discussed by most nurses was the availability and accessibility of information, the building of knowledge. The battle with the infodemic, as well as ‘infoveillance’ (Eysenbach, 2020) i.e. systematic surveillance of information applications in public health, is a concern this thesis engages with; especially when the WHO suggests it to be integral for the next pandemic (2022). Information by WHO, based on one sided modelling, influenced the reactions to the pandemic, while leading to fear among the people.

However, information that suggested otherwise, was veiled. Knowledge was thus (mis)moulded. The ‘cake’ model of acquiring knowledge (Eysenbach, 2020), as discussed in Chapters Four and Six, explains how an “up and down” flow of E-health literacy was experienced during the pandemic. Where each cake layer influenced the others; especially given the WHO Infodemic management suggestions of curtailing information (Calleja et al., 2021; Tangcharoensathien et al., 2020). To see information dissemination in each layer vertically and then the flow of information horizontally, from science to social media illustrates how has the discourse of pandemic changed over the last three years (see Chapter Six and Seven).

Eysenbach (2020) mentions in the beginning of the pandemic times, “The price for freedom of speech and improved information technology is an increased susceptibility to infodemics. We are entering the age of infodemics” (p.15). As Fairclough suggested, our interpretation of knowledge is influenced by external factors, such as politics of commercial messages, selective reporting, misrepresentation, misinformation (2015). In E-health literacy we constantly check information, share, filter, analyse, correct, transform, and then again share the reviewed information. In this constant flow of information monitoring, the ‘infoveillance’, it is necessary to present the reviewed and analysed data and prevent deviance from the same (Calleja et al., 2021; Cha et al., 2021; Gallotti et al., 2020). In my analysis I explored how the infodemic’s managing tools assisted the nurses; if and how WHO’s (mis)information fighting strategies were beneficial to them; how did interpretations of ground reality by the media changed policies and at the same time how did the (social and news) media respond to the policies. This weaving of information has been creating a unique slice of E-health literacy cake that combines information and experiences from ends of the debate into knowledge.

The International Council of Nurses in 2021 called “nurses to be at the centre of the new WHO global agreement on pandemic prevention and response” (ICN, 2022, para 2). At the present, there is an ongoing preparation for the next pandemic (WHO, 2023), as mentioned by Bill Gates in his presentation ‘How to prevent the next pandemic’ (Gates, 2023) and by other experts (Tedros, 2023). A new WHO Pandemic Treaty may be signed soon by most governments of the globe is being

discussed (Taylor, 2023). The next pandemic may again require engagement of health care professionals. The chapter partially questions, how would WHO address the issues presented by the nurse (in my sample set) during Covid-19.

Lev and Dolberg (2022) share concerns of a head nurse struggling with missing policies with regard to attending Covid-19 patients. After an outbreak of Covid-19 in her geriatric facility, she reported “no one told me what to do with the residents when they got sick. I just ordered ambulances, one after another, until a district doctor called me and said, you killed the hospital, they have no place left. I said, so what do you want me to do?... You did not tell me what to do” (p.12). The problem of decentralized drafting of policies and thus initial chaos was mentioned by nurses in Israel and NZ (Chapter Six).

Nurses are to practice according to evidence-based medicine. We are obliged to constantly learn, be aware of the newest data, make sure doctors make no mistakes in their prescriptions, since a nurse is the one giving the medicine to the patients. Nurses are required to identify a problem, question the validity of treatment, be strong enough to confront the doctor if patient’s wishes are not being respected. Ask questions. Always ask questions, since, literally, life depends on it. The rapid change in the information about the ‘best tool available’ against the virus, the vaccination (WHO, 2021), can be seen in the development in peer review studies reporting findings from ‘the Pfizer laboratory’, Israel, during 2021 (Table 8-1). On September 25, 2020, three months before FDA emergency approval of Pfizer vaccine, WHO reported: “It's going to take months and years to be able to ramp up to the billions of doses needed to protect 60, 70% of the population” (WHO, 2020, p. 1)

Table 8-1: Peer reviewed literature on Pfizer in Israel 2021

Vaccination drive started in Israel on December 19, 2020 (2 Pfizer shots) July 30, 2021, a booster become mandatory.		
February 24, 2021	Cases reduced by 94%.	Dagan et al., 2021
May 15, 2021	Vaccine reduces transmission, effective against hospitalisation, severe disease, death	Haas et al., 2021
July 7, 2021	Vaccine effectiveness in preventing infections 80-95%	Regev-Yochay et al., 2021
August 19, 2021	Household transmission 40-50% lower in vaccinated	Harris et al., 2021
September 30, 2021	Waning immunity, protection for individuals without comorbidities. Booster may be needed	Shitrit et al., 2021
October 7, 2021	95% efficacy among 1 st booster recipients	Yinon et al., 2021
October 14, 2021	Vaccinated health care workers less contagious than unvaccinated	Bergwerk et al., 2021b
October 27, 2021	Fading effectiveness (after 2 nd dose)	Goldberg et al., 2021
December 1, 2021	Vaccinated (with 1 st booster) must test since they can be positive. 2 nd booster recommended	Canas et al., 2021
December 23, 2021	90% lower mortality after 1 st booster	Arbel et al., 2021 ¹⁰

¹⁰ This finding is currently questioned for flaunt methodology: Hoeg, T. B., Duriseti, R., & Prasad, V. (2023). Potential “healthy vaccinee bias” in a study of BNT162b2 vaccine against Covid-19. *New England Journal of Medicine*, 389(3), 284-286. <https://doi.org/10.1056/NEJMc2306683>

Since 2020 social media discussions, pre-prints and peer review studies are arguing that natural immunity provides a better protection than a vaccine (Gazit et al., 2021; Pilz & Ioannidis, 2022; Stein et al., 2023). Essential workers, who were infected with Covid-19 in 2020 and refused to vaccinate, claiming natural immunity, were facing losing jobs, as reported by mass media ‘Hospitals remove hordes of anti-vax workers who defied mandate’ (Campanile, 2021) or as an article ‘Underground network of anti-vax doctors and nurses continues to issue dodgy Covid vaccine exemption letters’ reported, Dr Jonie Girouard was fined \$300 for treating patients while unvaccinated and her registration was withdrawn. (Wall & Broughton, 2022). On the question of breakthrough infection WHO experts reported in 2021: “Vaccinated individuals who subsequently become infected with SARS-CoV-2 are more likely to have asymptomatic or milder cases of Covid-19 and have lower viral loads compared to unvaccinated individuals who become infected” (Health, 2021, May 25, p. 1). This statement was supported by CDC study from August 6, 2021, confirming vaccination offers higher protection than previous infections. However, four months later CDC backtracked, and on January 2022 supported findings on natural immunity: “persons who survived a previous infection had lower case rates than persons who were vaccinated alone” (CDC, 2022, p.1). On August 25, 2021 preprint ‘Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus breakthrough infections’(Gazit et al., 2021) concluded the natural immunity offers stronger protection against Covid infection and symptomatic disease. This Israeli study was supported by findings from South Africa about Omicron (Kimball, 2021; Wolter et al., 2022). Five months after issuing a statement that vaccine immunity protects against Covid better than natural immunity, the Center for Disease Control and Prevention sent a report (CDC, 2021) showing the opposite is true” (Charbonneau, 2022). On April 5, 2022 the Israeli preprint about superiority of natural immunity was peer review and published in *Clinical Infectious Diseases*. (Gazit et al., 2022). Those findings were supported by other studies (Pilz & Ioannidis, 2022; Stein et al., 2023).

From the beginning of the pandemic scientists have been calling for data transparency. Peter Doshi, a senior editor of *BMJ*, argued “there is no science without

data” (Doshi et al., 2022, para 2). In his open letter to CEOs of Pfizer and Moderna ‘Covid-19: Researchers face wait for patient level data from Pfizer and Moderna vaccine trials’ Doshi et al. (2022) asked for immediate availability of data, since “widespread use of interventions without full data transparency raises concerns over the rational use of Covid-19 vaccines” (Tanveer et al., 2022, p. 2). At this moment majority of available data are being retrieved by request of Freedom of Information Act (FIA).

8.3.2 Fear

“Fear does not stop death. It stops life”. (Keeland, 2021 [Tweet])

In 2004 a workshop of the Centre for Disease Control [CDC] unveiled a blueprint for annual flu vaccination campaign, the ‘Recipe for fostering public interest and high vaccine demand’ (Nowak, 2004). It encouraged journalist to describe each influenza season as ‘very severe’, ‘more severe than last or past years’, or ‘deadly’ (Figure 8-1), since in health communication “the belief that you can inform and warn people and get them to take appropriate actions or precautions with respect to a health threat or risk without making them anxious or concerned.... this is not possible” (slide 33).

“Recipe” that Fosters Influenza Vaccine Interest and Demand (2)

3. Medical experts and public health authorities publicly (e.g., via media) state concern and alarm (and predict dire outcomes)– and urge influenza vaccination.
4. The combination of ‘2’ and ‘3’ result in:
 - A. Significant media interest and attention
 - B. Framing of the flu season in terms that motivate behavior (e.g., as “very severe,” “more severe than last or past years,” “deadly”)

“Recipe” that Fosters Higher Interest and Demand for Influenza Vaccine (1)

1. Influenza’s arrival coincides with immunization “season” (i.e., when people can take action)
2. Dominant strain and/or initial cases of disease are:
 - Associated with severe illness and/or outcomes
 - Occur among people for whom influenza is not generally perceived to cause serious complications (e.g., children, healthy adults, healthy seniors)
 - In cities and communities with significant media outlets (e.g., daily newspapers, major TV stations)
3. Significant media outlets (e.g., daily newspapers, major TV stations) are used to disseminate information about the disease and the vaccine.

Figure 8-1: CDC recommendation for marketing

In 2007 Annas warned: “it is predictable that public health officials with the power to arbitrarily quarantine people in an emergency will use it immediately, whether it is warranted or not” (Annas, 2007, p. 1095). During Covid-19 times anxiety levels increased worldwide. The never-ending fear mongering provided by official media made normal living basically impossible (Caduff, 2020; Chung-Ying et al., 2021; Dodsworth, 2021). The applied biopolitical practices of the Covid-19 pandemic did not differ from those initiated during the bubonic plague epidemic in the fourteenth century: isolation, surveillance, segmentation, restrictions and prohibitions on movement, discipline, and punishment (Agamben, 2020). As Foucault noted, the towns in quarantine were the “utopia of the perfectly governed city...traversed throughout with hierarchy, surveillance, observation, writing; the town immobilized by the functioning of an extensive power that bears in a distinct way over all individual bodies” (Foucault, 1979, p. 198).

Fear and compliance create a mass formation, where people self-corrected their actions not to avoid the virus, but to avoid a punishment. (Desmet, 2023; Horton, 2021; Lévy, 2020). At the same time, “draconian action runs the risk of public backlash...incurring a price that the public is not willing to pay. The Universal Declaration of Human Rights should continue to be public health’s ethical guide” (Annas & Galea, 2021, p. 1). The pandemic policy was never formed by evidence, but by the fear of worst-case scenarios (Sabhlok, 2023). The everyday message on TV was not to give a hope. Since the virus is invisible, the public needed to be constantly reminded about the danger, as discussed in a study ‘Face mask during the Covid-19 pandemic: A simple protection tool with many meanings’ (Martinelli et al., 2021). Masks “signalled specific moral or political stances, expressed belonging to certain communities” (Schönweitz et al., 2022, p. 13). Every day, since February 2020, the news around the globe was full of statistics, numbers, reports. The overload of scary information, together with lockdowns, increased the fear (Desmet, 2023). People getting better were not news-worthy (Dodsworth, 2021). The ever-changing rules were explained on TV, creating the need for the citizens to stay informed, as not to break a rule. However, as Morawska et al. (2023) explained, “A ‘hygiene theatre’ was established, hands were disinfected countless times during the day; surfaces in public

spaces were deep cleaned; groceries from supermarkets were disinfected; and gloves were worn to avoid surface virus. But the virus was principally in the air, with limited evidence that fomites or hard surfaces play a significant role in transmission” (p. 4).

The world leaders were threatening disobeying, noncompliant citizens (Figure 8-2). The emergency of exception become “a chronic emergency, [which] is no emergency at all. It becomes, rather, a justification for not acting rationally” (Annas & Galea, 2021, p. 1). PM Ardern promised six months of freedom with a booster. What happens to those without the ticket to freedom, the non-boostered ones, who were told they will be free after two doses? Is there any hope to go back to ‘BC life’, the Before Corona times?



Figure 8-2: Six months of freedom

As Desmet (2023) argues, fear is the most primitive and earliest human emotion, unresponsive to reason, and therefore tends to charge ahead of our capacity to regulate our emotions, to reflect on our logic. Ponesse (2022) argues that fear has the capacity to infect every other emotion. “Shame is fuelled by fear that the shamed one will undermine what keeps us safe, anger can lead to unreflective scapegoating fed by the fear.” (para 3). The Covid-19 pandemic is the first truly global event, the pandemic has affected everyone, uniting us in fear (Badhken, 2020). PM Jacinda Ardern asked the people of NZ on March 14, 2020 to ‘be kind’ (Figure 8-3). “I know people will want to act as enforcers... We will play the role for you. What we need from you, is to support one another... Be strong and be kind” (Ardern, 2020, para 1). As Ardern promised, the role of enforcers was taken upon by the state.



Figure 8-3: Be kind

Fairclough speaks of dominant as well as hidden discourse. The dominant discourse is owned by those in power, the institutions that normalized the social order and 'own' the one truth. This super truth can change without warning. One of the official CDC narratives went from vaccinated will not get Covid-19, to will not get sick, will not be severely sick, will not die, to today's somehow accepted reality we should get a booster every six months even if boosted individuals get sick, be hospitalized and die. Israelis voted for the vaccine with their feet. As soon as vaccination mandates ended, after 3rd shot (first booster), the interest declined from original first time vaccinated 6,720,592 individuals to 'Omicron' booster being requested by only 316,570 people (Figure 8-4).

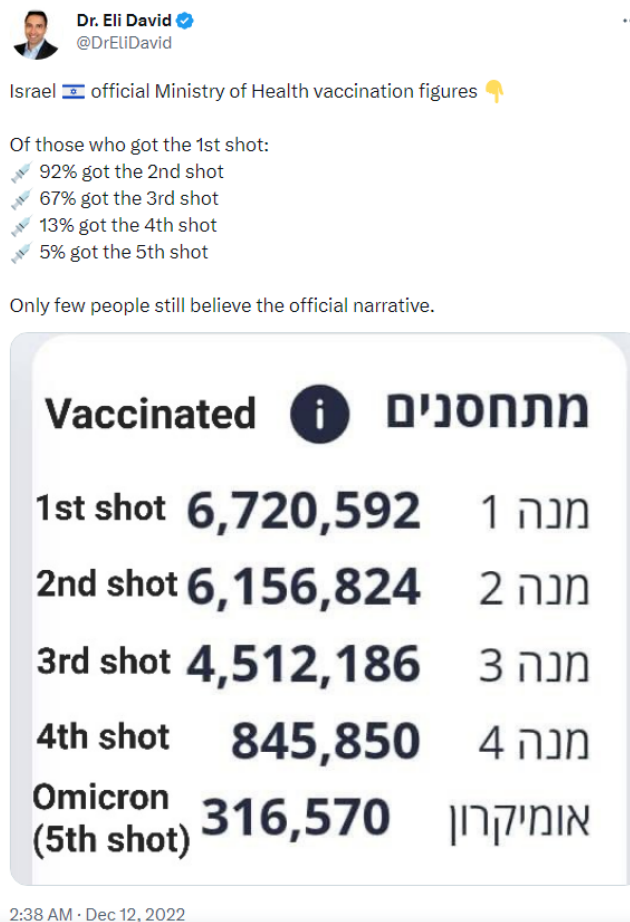


Figure 8-4: Vaccination status Israel Dec 2022

Even more interesting is the development of a percentage of vaccination between doctors and nurses (Figure 8-5). The health care workers, the ones who actually knew the virus firsthand, chose not to take the safe and effective protection once it was no longer required for an everyday normal activity. Seventy six percent took the first Pfizer vaccination, from those ninety-eight the second vaccination. It is unclear what happened with the two percent who opted out of the second dose. And from those ninety-six took the first booster. The vaccination uptake dropped to twenty percent with non-mandatory second booster.

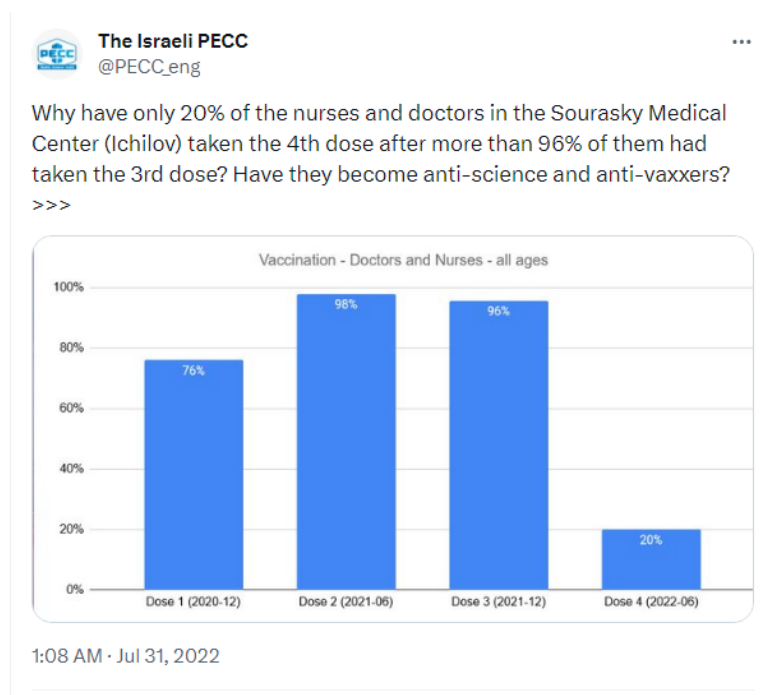


Figure 8-5: PECC: Vaccination of doctors & nurses

These waning vaccination numbers suggest lack of motivation and reduced trust in the government narrative, and this was described by the participants in my study. In the beginning Israel served as the Pfizer laboratory (Burla, 2020); and the electronic health care records with personal ID numbers of Israeli citizens were to assist the knowledge about the vaccine efficiency (Philo, 2021; Rosen et al., 2021). Reports from Israeli nurses working on Covid-19 wards before, during and after vaccination:

“I am talking about my feelings... there were several weeks that’s we felt that the vaccines helped and that the people that didn’t take the vaccine that it was less good for them. Several weeks.” (Dikla , IL)

“I couldn't really say the statistic, but I think business was a little bit slower after the vaccine. I think that the majority of the cases that were in the Covid ICU were patients who were immunocompromised, people with autoimmune disease, cystic fibrosis, transplanted lungs, kidneys, hearts, livers, all of the above you know, oncologic patients that somehow got Covid, they got it the worst.” (David, IL)

In 2022, Israeli journalist Yaffa Shir-Raz posted on Twitter her findings from a leaked zoom conference of Israeli Ministry of Health (Shir-Raz, 2022a; Shir-Raz, 2022b). Surprisingly, the electronic data were, according to this video, not collected. The research team commissioned by the MoH Israel concluded “we’ll have to think in medical-legal terms how to present our findings to avoid lawsuits. Why? Because even though there were quite a few side effects, we said: ‘OK, it exists, and reports exist, but still get vaccinated’” (Shir-Raz, 2022a; p. 2). The video was confirmed by MoH to be real (Stieber & Onely, 2022). The findings in academic literature, based on the data from Israeli hospitals, changed rapidly during the year of 2021, as mentioned previously. According to first published articles the immunization was a success. On May 15, less than five months after the start of the vaccination, a study published by Sharon Alroy-Preis, the Israeli MoH representative, was confident: “two doses of BNT162b2 were highly effective against laboratory-confirmed SARS-CoV-2 infections and Covid-19 hospitalisations, severe disease, and deaths in a nationwide observational study... the high effectiveness against all SARS-CoV-2 infections and apparent effectiveness against infections that were asymptomatic at the time of epidemiological investigation suggest that BNT162b2 might reduce SARS-CoV-2 transmission. Taken together, these findings suggest that high vaccine uptake can meaningfully stem the pandemic and offers hope for eventual control of the SARS-CoV-2 outbreak as vaccination programmes ramp up across the rest of the world.” (Haas et al., 2021, p. 5).

One month later, in a comparative effectiveness study “of 503,875 individuals who received 1 dose of the BNT162b2 vaccine, the first dose of the vaccine was associated with an approximately 51% reduction in the risk of SARS-CoV-2 infections... the first dose was associated with 54% effectiveness against symptomatic Covid-19” (Chodick et al., 2021, p. 1). Positive results were also reported in a study published on August 19, where vaccinated had “54% lower household transmission” (Harris et al., 2021, p. 12). And on October 14, 2021 study concluded: “no secondary infections were traced back to any of the breakthrough cases, which supports the inference that vaccinated health workers were less contagious than unvaccinated persons ”(Bergwerk et al., 2021b, p.86). A study from September 30, 2021, reported a

waning immunity: “among twice vaccinated and masked individuals... a third vaccine dose may be needed, particularly in individuals with risk factors for severe Covid-19” (Shitrit et al., 2021a, p.14). By the time the study was published a third vaccine was already administered to 4.5 million Israelis.

As a vaccinated nurse, I did not need PCR checks, even though a study from December 2021 contradicted this official hospital policy: " Our study highlights the critical importance of testing individuals, even if recently vaccinated, to ensure early detection of SARS-2 infection.” (Canas et al., 2021). The fading of the effectiveness started to be reported more and more (Bergwerk et al., 2021a; Goldberg et al., 2021). At the same time Tweet (Figure 8-6) by Dr Rafael Zioni, where the doctor concluded the vaccine efficacy is ‘close to zero’, was trending.

rafael zioni
@rzioni · Follow

This is the Israeli data for infection breakthrough among vaccinated with 2 shots of Pfizer. Seems that efficacy is close to zero..

med Cases, July 4 th – July 10 th , Vaccinated* vs. Unvaccinated		med Cases, June 27 th – July 3 rd , Vaccinated vs. Unvaccinated	
Cases, Unvaccinated	Percent of Cases Vaccinated	Cases, Unvaccinated	Percent of Cases Vaccinated
61	78%	5	79%
84	75%	3	80%
54	87%	5	84%
26	90%	7	88%
14	94%	4	89%
12	92%	0	93%
6	88%	3	92%
נדבקים לא מחוסנים	אחוז נדבקים מחוסנים	2	100%
קורונה מאומתים, 4 ביולי עד 10 ביולי, מחוסנים לעומת לא מחוסנים		נדבקים לא מחוסנים	אחוז נדבקים מחוסנים
Health Dashboard health.gov.il/COVID-19/general		קורונה מאומתים, 27 ביוני עד 3 ביולי, מחוסנים לעומת לא מחוסנים	
		Health Dashboard health.gov.il/COVID-19/general	

10:29 PM · Jul 14, 2021

[Read the full conversation on Twitter](#)

Figure 8-6: Dr Zioni Tweet questioning Pfizer efficacy

As mentioned, already in January 2021, days after the start of the vaccination drive, reports discussing the safety and security of the vaccines started to appear on Twitter, Facebook, Telegram, personal online blogs, in pre-prints and much later in peer review publications. Prof Levi from MIT, himself vaccinated, was posting about his findings of an increase of ambulances calls to assist in cardiac arrest and heart attacks in young men after the start of the mass vaccination in Israel (NewsRescue, 2021; Retsef, 2021; Sun et al., 2022). Later his findings were confirmed by pathology discoveries of prof. Burkhardt in Germany, who presented the issues of a presence of a spike protein from mRNA vaccines in heart, brain and ovaries. (Figure 8-7).



Figure 8-7: Prof Levi retweets Prof Burkhardt's study

The social media's call to stop the vaccinations is becoming more urgent (Bardosh et al., 2022; Hu et al., 2023; Irrgang et al., 2022; Prasad, 2022b; Rose, 2023) And even though CDC adviser reported 'Not enough data to support multiple annual

Covid booster’ (Samal, 2023, para 1), NZ administered in the week of July 23, 2023 total of 8,153 vaccines, with some people receiving 3rd booster, meaning those with 3 primary are at dose number six, as can be seen in Figure 8-8. Israel vaccinated in the same week 25 people in total (MoH, 2023).

Total Vaccinations

	Vaccinations last week	Cumulative total
First dose	19	4,031,830
Second dose	38	3,984,957
Third primary	8	34,602
Booster 1	377	2,770,329
Booster 2	3,046	964,114
Booster 3	4,517	398,689
Paediatric First Dose	61	271,437
Paediatric Second Dose	68	157,916
Infant First Dose	2	127
Infant Second Dose	5	98
Infant Third Dose	2	43
Total doses	8,153	12,614,391

Figure 8-8: NZ vaccination 2023

In February 2023, professor Mevorach discussed his problems trying to report the side effects of the vaccination to Pfizer (Figure 8-9). The potentially lifesaving findings from January 2021 were published in peer review twelve months later, in December 2021: “The incidence of myocarditis, although low, increased after the receipt of the BNT162b2 vaccine, particularly after the second dose among young male recipients” (Mevorach et al., 2021, p.14). In a study published in March 2022 the findings on the increase of myocarditis are more specific: “the incidence of myocarditis leading to hospitalization among adolescents who received the second dose of the BNT162b2 vaccine was low but was higher than among recipients of the first vaccine dose and proportionately numerically higher than in recent estimates of incidence among unvaccinated persons” (Mevorach et al., 2022, p. 11). In September 2022 the problem looks even more serious: “On November 17, 2021, the US FDA expanded the Emergency use authorization for the Pfizer and Moderna coronavirus disease 2019 (Covid-19) vaccines to include boosters... There were low but increased incidence rates, mainly in young male individuals, after the second vaccination,

suggesting a causal relationship between second vaccine administration and myocarditis. These findings raised concerns about potential post booster myocarditis.” (Mevorach et al., 2022, p.8)

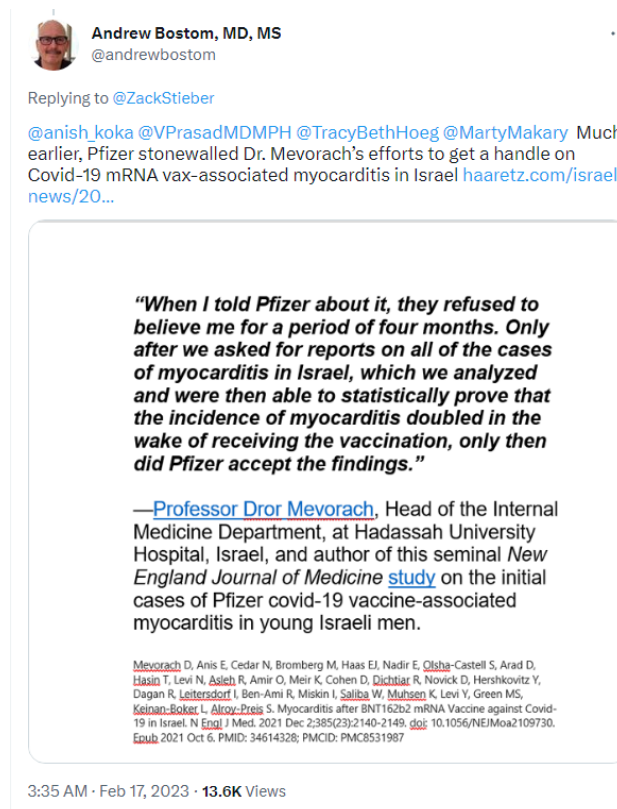


Figure 8-9: Prof Mevorach's problems reporting to Pfizer

Dr. Shachar, a specialist in internal medicine, cardiology, emergency medicine and health administration, founder of Emergency medicine department at Tel Aviv University and head of ER at Laniado Hospital (PECC, 2022), testified to a special Covid-19 committee in the Israeli parliament, The Knesset, that doctors were instructed to ascribe every death of Covid-19 positive patient as a Covid-19 death (Rosenberg, 2020). His speech from September 2020 was summarized in English in Dan Aridor's Tweet (Figure 8-10).

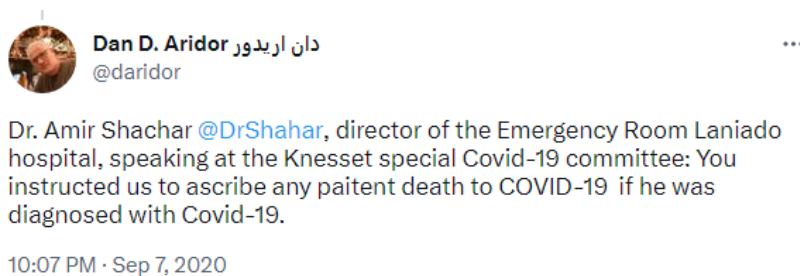


Figure 8-10: Knesset testimony of Dr Amir Shachar

A few months later, Dr Shachar made a video distributed by The Israeli Public Emergency Council for the Covid-19 crisis, warning against the Covid-19 vaccination mandates. He was one of ninety-three Israeli doctors who signed a protest letter calling for an urgent stop of administering Covid-19 vaccine to children on April 10, 2021 (Staff, 2021). And he got fired for voicing his opinion. Israeli/Canadian scientist Jessica Rose, who has a PhD in computational biology and 2 post-doctoral degrees, one in Molecular biology and second one in Biochemistry, is posting in her substack ‘Unacceptable Jessica’(Rose, 2023) analysis of VAERS (Vaccine adverse event reporting system) reports. She is reporting on increase in cancers, myocarditis, fertility issues.... A nurse can try to keep up with the evidence-based data, but in reality, it is an impossible full-time job.

8.3.2.1 The mandates

As mentioned previously, the vaccination passport became the most alienating domestic policy ever devised, the unvaccinated became strangers in their own land. The mandate effectively divided the society into two. As Aaron Kheriaty summed up in his book ‘The new abnormal: The rise of the biomedical security state’ (2022), this temporary license turned people into aliens in their own homeland. In December 2020, when I received my first vaccination, I was told it was to assist with a return to a normal life. I gave the same information to people lining up to receive Pfizer shots in the vaccination tent. Nobody mentioned an expiration date and the need to get periodical boosters, which effectively perpetuated the division of populations, even within family homes. This bio-racism ostracised the unvaccinated, unmasked, the granny killers (Desmet, 2023; Kheriaty, 2023a). As Mbembe (2003) argued, “the

ultimate expression of sovereignty resides, to a large degree, in the power and the capacity to dictate who may live and who must die” (p.19).

The mandates developed into regulations that penetrated even the smallest details of everyday life, as already warned of by Foucault in *Discipline and Punish* (1976). The Prime Ministers of Israel and New Zealand delivered passionate messages on television urging citizens to get vaccinated. Ardern’s statements, “If you want summer, get vaccinated” (NZDT, 2021, para. 1) and “You have all those rights only if you are vaccinated” (O’Dell, 2021, para. 1), echoed a similar proposal from Israel’s PM Bennett, who suggested a lockdown for the unvaccinated, since “patience for the unvaccinated Israelis has run out” (Daventry, 2021, para. 1). In Israel, only 75 years after Eichmann’s Final Solution, I needed the correct paper to sit on a beach chair (Figure 8-11).



Figure 8-11: Tel Aviv beach (summer 2021)

The debate around vaccination mandates, which have played a role in increasing vaccination coverage, reflects the complex intersection of public health, individual rights, ethics, and legal considerations. Foucault in ‘The will to knowledge’ (1976), explains that for regulatory and corrective power to function, it needs to qualify, measure, apprise and hierarchise. As Klitzman (2022) wrote, the judicial system is incorporated into the continuum of medical apparatus. The issue is, at what

point does the government's control over freedom and body become coercive and draconian?

8.4 War language

Fairclough wrote in *Language and Power* (2015): “There are analytically separable elements in the processes of meaning-making: the production of the text, the text itself, and the reception of the text” (p. 10). Part of the analysis of text involves identifying what is assumed—the unsaid parts. This includes making contrasts and comparisons, discovering common and unusual patterns, and summing up particulars into generalizations. It also involves noting the relationships between variables and identifying intervening factors (Fairclough, 2000). The difference between what is said and what is done was evident throughout the pandemic. Language played a crucial role in shaping the narrative of the pandemic. According to Charon (2010), we understand other people through language, and we shape and adjust our communication to meet our needs. Language depends on symbols.

8.4.1.1 *The symbol of the mask*

During Covid-19, new symbols entered our lives, the most prominent being the ever-present mask. The mask serves as a barrier to communication, both physical and symbolic (Schwarz et al., 2021). Casey et al. (2021) argue that wearing masks formed a wall between nurses and their patients, particularly for some patients who lack understanding of English, as well as for deaf patients who are unable to lip-read or see an encouraging smile from their nurse. Agamben wrote in 2021, “A country that decides to renounce its face, to cover with masks the faces of its citizens everywhere, is a country that has purged itself of any political dimension” (p. 87). A Cochrane review on the reduction of the spread of respiratory viruses by masking analyzed findings from various peer-reviewed articles from around the world (Jefferson et al., 2023) and concluded that masks are not useful as a tool for fighting the virus. Still, the WHO tweeted guidelines on January 13, 2023, strongly recommending masks (WHO, 2023c). On the same day, Professor Vinay Prasad posted a comment on his blog about the inconsistencies in public health policies:

“They are hell-bent on making medicine a bureaucratic hell...” (Prasad, 2023a, para. 7).

Nurse Kristen Nagle, from Ontario, Canada, had her position in the Pediatric Intensive Care Unit (PICU) terminated for questioning the masking of children (Nurses, n.d.). Maya, a nurse interviewed from Israel, voiced a similar concern regarding her work with neonates. A systematic review of 597 studies on child mask mandates found no evidence to support the masking of children (Sandlund et al., 2023). In a recent review, the effects of mask-wearing on patient contact and communication were resoundingly clear, with 93% of the articles reviewed identifying that masks affect speech understanding in both normally hearing and hearing-impaired adults. Masks hinder communication between patients and healthcare professionals (Francis et al., 2023).

As noted in a study by Pilosof et al. (2021), patients on a Covid-19 ward in Israel remembered the tele-robot, which had a built-in monitor displaying the face of a nurse who could be seen smiling, talking, and reacting to patients’ requests. This gave a “sense of human empathy through a visible face, without mask and PPE protection, digitally mediated” (p. 5). The robot became more human than the masked nurse. The essential form of human interaction was lost due to masks and was replaced by digital communication, which requires different tools for the exchange of ideas (Kheriaty, 2022). The prohibition of social gatherings emphasized this shift in communication. “Bare life, and fear of losing it, is not something that unites people; rather, it blinds and separates them” (Agamben, 2021, p. 18).

8.4.2 The soldiers on frontline

War terms were commonly used in the media, including phrases like "closed borders," "roadblocks," "mass graves," "emergency," "arm," "virus as an enemy," and "police and military forces guarding national borders." Nobody knew what to expect, and many countries were described in a nationalist tone, where the number one priority was themselves. The use of military terms during the pandemic has been discussed in academic literature (Gendler et al., 2022; Green et al., 2022; Marey-Sarwan et al., 2022) as well as in mass media. Terms such as "fight," "wars," and "soldiers on the frontline" were frequently employed (Atlas, 2021; Jaffe-Horrman,

2020; Marey-Sarwan et al., 2022; Staff, 2020d). As mentioned, Israeli nurses compared the hospital hierarchy to army structure, the most vocal was Katya (IL): “*I was an officer in the IDF, and all the structure of the hospital reminded me of the army.*”

New Zealand provides examples of military language in the news, such as “front-line workers,” “battleground,” “defeated,” and “victory” (Hatchard, 2022; Marey-Sarwan et al., 2022; Ray, 2021). Prime Minister Ardern announced a victory on April 27, 2020, stating, “There is no widespread undetected community transmission in New Zealand. We have won that battle” (Neuman, 2020, p. 1). Beattie and Priestley (2021) discussed New Zealand's COVID elimination strategy in “Fighting Covid-19 with the Team of 5 Million: Aotearoa New Zealand Government Communication During the 2020 Lockdown.” However, I did not hear military terminology from the nurses in New Zealand themselves.

Berger (2021) argued that there is a “top-down, ‘command and control’ structure not dissimilar to military organizations in hospitals... Though they brim over these days with fine words and caring mission statements, we all know they are rigid, unkind bureaucracies... In such authoritarian, often bullying regimes, the pressure to conform need only be explicit occasionally. Fear of censure and fear of letting others down will do the rest” (p. 1). This power imbalance within hospital structures became very visible during the pandemic. The military-like structure enabled the “new abnormal,” where it is entirely reasonable for healthcare workers to go to work with the expectation that they will eventually contract a life-threatening illness (Berger, 2021, p. 2). The power dynamics in hospitals, where nurses feel low on the totem pole and believe they have no say in matters related to safety and security, have been discussed in many studies (Aswad & Loleh, 2021; Morawska et al., 2023; Savitsky et al., 2020; Schippers et al., 2022).

A survey conducted in the early months of the pandemic by Sperling (2020) concluded that “about one-third [of nurses] feared going to work because of potential contraction and due to feeling inadequately protected. While 40.9% were scared to care for COVID-19 patients, 74.7% did not believe they had the right to refuse to treat certain patients” (p. 1). The apprehension to say “no” was particularly expressed by

Leana and Maya, who were afraid of receiving poor shift rosters if they refused to volunteer for the Covid-19 ward. Katya left to avoid facing the imbalance of the hierarchy. As mentioned in Chapter 7, Kim remembered her friend Judy, who felt crushed by the hierarchy. The story of a nurse who simply asked for a different placement highlights the irrationality of hospital actions during the pandemic, where healthcare workers faced consequences for any signs of disobedience.

8.5 Discursive social constructs: The battle for truth

“I am the way and the truth and the life” (Jesus in King James Bible, 1769/2017, John 14:6).

Foucault explained ‘truth-telling’ as a way of speaking that break through established social consensus. Whoever speaks the truth disrupts the bubble in which the group seeks refuge, ease, and security. “This makes speaking the truth a dangerous endeavor. It strikes fear in the group and results in anger and aggression. Truth-telling is dangerous; yet it is also necessary” (Desmet, 2022, p. 35). The Covid-19 era brought about chaos in understanding what truth was.

New Zealand Prime Minister Ardern proclaimed that her government owned the only truth and that citizens needed to look for central instructions to keep themselves informed to follow mandatory directions (Ardern, 2020). Briefings from ‘the podium of truth’ within the New Zealand Parliament became a daily reality. Censorship unified scientific knowledge and enhanced agnotology, becoming a tool of politics (Lee, 2020). Policies and decision-making were dictated rather than developed through discussions or explorations of available data. The entire apparatus served the government of the day. Instead of evolving science, there was a stubborn consensus on non-pharmaceutical interventions without debate, ignoring previous experiences and disregarding possible harms and side effects. Cost-benefit analysis was not conducted. My findings from Twitter (Chapter Six) illustrate the dissonance between the ‘official truth’ and the stories from people on the ground around the world. Foucault refers to this as the “battles of truth,” and “by truth, I do not mean ‘the ensemble of truths which are to be discovered and accepted,’ but rather ‘the

ensemble of rules according to which the true and the false are separated and specific effects of power attached to the true” (Foucault in Gordon, 1980, p. 132).

For nurses, this battle for truth emerged not only in the ever-changing policies that directed care and patient management but also in the ways they were acknowledged and supported. This struggle extended to the statistical information on deaths of health professionals, with both the media and global organizations like the WHO inflating the figures. The reasons for this inflation are unclear, as it certainly did not help nurses, who, as frontline workers exposed to infection daily, were already filled with anxiety about contracting the virus and bringing it home.

In early 2020, it was believed that nurses faced a significant risk to their lives while going to work (Bandyopadhyay, 2020; Vera-Alanis et al., 2022). In 2021, the head of the WHO, Dr. Tedros, claimed that at least 115,000 healthcare workers had died because of Covid-19, with 200 healthcare workers dying every day (WHO, 2021b). This statistic was questioned at the G7 meeting by the CEO of the International Council of Nurses, who noted that there was little data to substantiate this claim (Catton, 2021). As argued by Kursumovic et al. (2020), the mortality rate among healthcare workers did not differ greatly from that of the general population.

Since the beginning of the pandemic, the definition of Covid-19 deaths has been problematic. The Centers for Disease Control and Prevention (CDC) stated in a ‘Vital Statistics Reporting Guidance’ from April 2020 that it was acceptable to report Covid-19 on a death certificate even in ‘probable’ or ‘presumed’ cases, including those with negative Covid-19 tests (CDC, 2020). Discussions about deaths with Covid-19 versus deaths from Covid-19 are still heated. Nowadays, ‘excess deaths’ is used as a reporting tool when discussing the toll of the pandemic (Ioannidis, 2023a; Joshi, 2023). However, data on ‘excess deaths’ among healthcare workers are not available. Even so, Dr. Tedros’ claim seems improbable.

The battle for truth took its toll on the mental health and wellbeing of nurses. We now know that fear and anxiety were ever present and negatively impacted on nurses at work and at home. Izaguirre-Torres & Siche (2020) argued the Covid-19 pandemic was a global catastrophe due to its mental health effect. Forcibly isolated

people are more likely to develop depression, PTSD, insomnia, and irritability (Holmes et al., 2020). A dissonance was ever present with a compliance to lockdown rule, which often did not make sense and were not evidence based (Ioannidis, 2020a). As Schippers (2020) argued, media outlets presented information in a biased manner, possibly in order to create a uniform narrative encouraging people to follow guidelines issued by governments and health organizations. People are more likely to follow orders that are explained as ‘preventing death’ rather than ‘saving lives’ (Bavel et al., 2020; Dodsworth, 2021; Desmet, 2023). In this reality nurses tried to provide the best care they could for their patients. In fact, for nurses, dissonance became a reality, because of their long hours, difficult nursing conditions and lack of support from their leadership.

8.5.1 ‘Regimes of truth’ and the control of populations

“Until we can stop nonsensical tweets, and begin dismantling the antivaccine disinformation confederacy and empire, it’s for certain we will never achieve Covid-19 herd immunity through vaccinations.” (Hotez, 2020 [Tweet])

Prof. Peter Hotez, MD, PhD, was named by *Time Magazine* a “Science Warrior” and one of the 100 most influential people in global health. In August 2021, he advocated for the deployment of federal police against those who disagreed with the official science, stating, “the problem is the disinformation empire, which is so vast and pervasive that until we do something more definitive to get to the source of the disinformation and stop it, it’s not going to have that much of an impact” (Hotez, 2021 [Tweet]). He continues to promote strict Covid-19 vaccination mandates to this day. Foucault's ideas about the control of knowledge are central to his broader exploration of power and its operation in society. In his later writings, Foucault emphasized the relationship between knowledge and power, particularly how knowledge serves as a tool of social control. He referred to the normalization of knowledge, wherein certain forms of knowledge become institutionalized and considered 'normal' within society. This normalization is a form of control, establishing what is acceptable or deviant in terms of knowledge and behavior.

Foucault introduced the concept of ‘regimes of truth’ to describe how certain statements or knowledge claims come to be accepted as truth within specific historical and cultural contexts. These regimes of truth are part of the power structures that shape social reality. Foucault explored how power operates in society through various mechanisms, institutions, and discourses. He contended that power is intertwined with knowledge; both are used to control and regulate individuals and societies. Foucault also discussed the concept of "truth" in the context of power, suggesting that truth is not an objective, fixed entity, but rather shaped by power dynamics and often used to serve the interests of those in power. ‘Regimes of truth’ are systems of knowledge and beliefs accepted and promoted by dominant institutions and groups. Thus, it can be argued that the pandemic granted the government a license to control the bodies of people by creating a narrative that asserts lockdowns, vaccinations, and isolation are beneficial for the public, positioning the government as the single source of truth.

At the beginning of the Covid-19 era, information contradicting the official narrative was suppressed for ‘the greater good.’ As such, the social contract shifted towards Hobbes’ Leviathan and his sword (Agamben, 2020; Kheriaty, 2023d). The debate about lockdowns between Agamben in *The Invention of an Epidemic* (2020a) and Žižek in *Panic! Covid-19 Shakes the World* (2020) represented a clash of two different interpretations of biopower. For Žižek, Covid-19 provided an opportunity to unite in solidarity against capitalist culture and to renounce Western values in the face of a common enemy. In contrast, Agamben argued that the war against an ‘invisible enemy’ is a slippery slope, where the unknown other is feared and restricted (Untea, 2022). He further contended that the evolution of biosecurity leads to a never-ending ‘state of exception’ created by the “ongoing health emergency” (2020, p. 7).

During the height of the pandemic, science (representing truth) related to Covid-19 was what the governments and WHO agreed it to be, and scientific debate was suppressed. However, as we emerge from the pandemic, the science of the virus is now being debated again, meaning that those truth claims are shifting as a new epoch emerges. On this shift in truth Dr McCullough tweeted on January 3, 2022: “Controlling information suppresses freedom. Propaganda has no place in a health crisis where physicians should lead with free interchange and medical progress. No

one holds a license on the truth!” (McCullough, 2022 [Tweet]). The ‘battle for truth’ is not for some absolute truth that can be discovered and accepted, but it is a battle over the control of truth and the economic and political role it plays (Foucault, in Rabinow, 1984).

The NZ islands were in a state of full-blown anxiety when New Zealand Prime Minister Jacinda Ardern famously stated on September 2, 2020: "We will continue to be your single source of truth... Unless you hear it from us, it is not the truth" (Parliament, 2020, para 1). While this paternal approach to protection was revealed, the resultant strategy for controlling public movement effectively canceled any thoughts of freedom. In the words of Wodak (2021), one could view Ardern “as a caring mother... she establishes national unity and reassures that the government has everything under control” (p. 7). Ardern exhibited ‘kindness’ by alleviating anxiety, replacing it with the ‘dizziness of freedom.’ However, as Hannah Arendt argued in *The Origins of Totalitarianism* (1951), we must deduce truth through our experiences freely, or we risk losing the ability to differentiate between true and false. We need to be free, or we lose our humanity, our ‘Kultur.’

Similarly, Søren Kierkegaard wrote about the 'dizziness of freedom'—the overwhelming sensation of contemplating all available opportunities. He argued that “without anxiety there would be no possibility and therefore no capacity to grow and develop as a human being” (Kierkegaard, 2014, p. 48). Kierkegaard's philosophy emphasizes that concepts of free will, anxiety, and uncertainty are essential to our human experience (Mullen, 2020). This was taken away during the uniform global response to Covid-19.

International organizations and collaborative efforts between countries have shaped global narratives about the pandemic. The WHO, CDC, FDA, and other health entities have contributed to establishing truths regarding the global response to the virus. Official media has played a significant role in influencing public discourse and disseminating information, particularly regarding the constantly evolving health messaging about the virus and its management. Certain narratives surrounding the virus's origin, the efficacy of public health measures, and the development of vaccines

contribute to the regime of truth associated with the pandemic. This situation has medicalized social issues and created dissent regarding what is right or wrong. Knowledge is power, but those in power control that knowledge. These regimes of truth have been identified across all my findings.

Not surprisingly nurses reported a sense of constant change as directive adjusted, as the truth that is acceptable about the virus and how to manage care, developed. While much was similar across the two countries (IL&NZ), there were also differences in the virus narrative. The ‘regimes of truth’ were not consistent. Overall, Israeli nurses reported non-stop experimenting with new technologies and treatments, being trained on extracorporeal membrane oxygenation techniques (ECMO) and participating in a swift vaccination drive. There was an underlying trust in medical knowledge development, rapid implementation of new treatments and advanced technologies. In NZ nurses did not have the same experience. This is echoed by Bhattacharya (2022c), who commented that NZ waited for the rest of the world to develop the saving vaccine, while being unable to contribute to this research due to unavailability of enough Covid-19 positive subjects in the Zero Covid-19 island (NZ).

8.5.2 Forced silence, conflicting value



Figure 8-12: LOTR books are banned

Language is a tool for understanding and communication. We comprehend others through language, shaping and adjusting our messages to serve our needs. Language relies on symbols (Fairclough, 2003). During Covid-19, new symbols entered our lives, the most prominent being the ever-present mask, as previously mentioned. Facial expressions and human touch were replaced by digital communication, which requires different tools for the exchange of ideas (Kheriaty, 2022). The prohibition of social gatherings further emphasized this alteration in communication. “Bare life, and fear of losing it, is not something that unites people; rather, it blinds and separates them” (Agamben, 2021, p. 18). In this thesis, I tried to explore the roots of the conflict, digging for the primary reasons, stripping away the noisy arguments and discrepancies hidden from view, and identifying the discourse normalized by the social order and accepted as the singular truth (Fairclough, 2015). It is this hidden truth that I seek to uncover and explore through the voices of nurses.

The goal of a pandemic approach is to prevent the spread of the virus; to safeguard the population, it is a top-down ruling. The individual needs are moved aside, being secondary to the needs of the community. Agamben worried about this problematic one health approach, where “Health has replaced salvation, biological life has taken the place of eternal life” (Agamben 2020b, p. 97). This sentiment is being mirrored by a study entitled, ‘It hurts your heart’ (Hegarty et al., 2022) with a conclusion that ethical conflicts during the pandemic were created by pre-existing systemic issues, with emphasis on quantity of life, not on the quality. The pandemic time was one of statistics, of emotionless numbers. Time when PCR tests replaced the nurses’ touch and robots provide diagnosis and treatment plan based on cold numbers.

A feeling of inability to care for patients led to a moral injury in health care workers. Max (NZ) discussed her vision for changes that need to start from the bottom, from the basic care for each individual human being: *“I think we need to fix it in a primary level, because our short staffing is happening in the secondary tertiary spaces, because our population has become so unwell since there is no care on a primary level.”* Prevention, education, primary level care for each patient is crucial. A family doctor needs to be available for a face-to-face visit. Our approach should be targeted to individual needs, to address each patient’s concerns on a personal level.

Healthy people were scoring better during the pandemic. As per data obtained by the Freedom of Information Act from Israeli MoH, zero Covid-19 positive patients died without comorbidities below the age of fifty. Healthy people were able to battle the virus (Levi, 2023). Similar data from NZ, based on Freedom of Information Act, was obtained. In the first six months of the pandemic, twenty-two people died due to Covid-19, majority with underlying conditions. Ten were over 80 years old, and not one below 60 (Ricardson, 2020).

As the policies and political narrative changed, nurses became disillusioned, realising that their dedication to their work was not valued, nor was it well supported. With increased knowledge and experience of the virus, nurses faced tensions between their values, beliefs, and what was demanded from them. As a consequence, the health care system in both countries lost the trust of the people they should serve, care for, and protect. Ten of the fourteen nurses interviewed mentioned the dehumanizing reality of Covid-19 with patients dying without saying goodbye to their families. Ethical questions, as examined by Sperling in 2020 and 2021, were ever-present in my zoom interviews. Nurses witnessed patients turning on medical staff, blaming nurses for the faults of the system. Questions about treating and not treating unvaccinated people were raised. The nurses verbalised frustration at being forced to constantly ask patients about their Covid-19 vaccination status and spoke of aggression levelled at them by patients, which they did not report, because they realised it would make no difference. Nurses were merely the messengers who bore the brunt of this mistrust and anger. While absorbing this constant negativity in the workplace, it was small wonder that the nurses described how their colleagues were so tired and so disillusioned, that they were leaving the profession.

8.5.3 Cognitive dissonance and moral injury

As Fairclough argued, “There are analytically separable elements in the processes of meaning-making: the production of the text, the text itself and the reception of the text” (Fairclough, 2003, p. 10). Part of the analysis of text is trying to identify what is assumed, the un-said part. This includes making contrasts and comparisons, discovering common and unusual patterns, summing up particulars into

generalisations, along with detecting the relationships between variables and finding intervening factors and building a logical chain of evidence. Fairclough's (2015) three-dimensional analysis argues there is a text, logos, a symbol, a catch phrase, such as the message about 'social distancing', directive to 'flatten the curve', request to 'be kind'. There is the interpretation of the text, such as the 'needle in every arm' policy, as explained by White House Covid-19 coordinator Dr Ashish Jha: "I really believe this is why God gave us two arms – one for the flu shot and the other one for the Covid shot." (Thakur, 2022, para 2). And there is the social practice. People divided into two classes based on their medical papers. As PM Ardern clearly stated it was her policy to split New Zealand into two groups, each with different rights and obligations, based on a vaccination status: "yap, that's what it is" (Wire, 2021, para 2). We obey to avoid punishment, as explained by the psychology of mass formation (Desmet, 2023). 'Corona-mania' gave people a cause in which to believe and an 'anti-virus tribe' to which to belong (Oshinskie, 2022). We got used to 'nonsense lexicon' as Julie Ponesse, professor of ethic and bioethics, argued (Ponesse, 2022), we adapted our language to the pandemic reality.

The dissonance was ever present around the world. Some airports required Covid-19 passport, others PCR tests, some simple masks, some N95. Passengers socially distanced at airport halls, only to sit next to each other while on the airplane. Yet no-one seemed to officially question the rules of one science construct with common sense view of how airborne viruses behave. Thus, one could argue that biopower was sanctioned and normalized at a policy level. Agamben's religion of health brings us the reality of biosecurity (Agamben, 2020). From the war on terror, where everyone was a potential terrorist, we shifted to war on a virus, where every individual is a potential plague-spreader. The issue is, there is usually a free choice in becoming a terrorist.

Interviews with the nurses revealed a significant disconnect between the official messaging regarding Covid-19 and the realities they faced on the ground. Many participants in my study articulated a pervasive sense of uncertainty, noting that even with resources like a Covid-19 hotline for hospitals in New Zealand, attempts to seek guidance often resulted in silence; calls went unanswered, leaving nurses without

the clarity they desperately needed amid shifting protocols. This sentiment was echoed by Max(NZ) and Lauren (NZ), who expressed frustration at the lack of support. As the pandemic progressed, nurses quickly learned to navigate this chaotic environment, but cognitive dissonance became an ingrained part of their routine. This behavioral inconsistency stemmed from the widening gaps between the knowledge they acquired, and the expectations placed upon them. With diminishing faith in the guidelines, nurses began to critically evaluate the efficacy of the instructions they were receiving.

Discussions emerged among nurses about “breaking the rules” in the interest of patient care. Maya (IL), for instance, shared her experience in Israel, where she allowed mothers to hold their newborns in the NICU without masks, prioritizing emotional connection over rigid adherence to guidelines. Such actions reflected a broader trend: as the emotional toll of the pandemic mounted, some nurses felt compelled to disregard illogical regulations for the sake of compassion. One New Zealand nurse recounted the actions of a funeral director who chose to let a grieving wife say goodbye to her husband, emphasizing the importance of human connection over strict lockdown measures, which typically prohibited family gatherings during funerals. This example highlighted the moral dilemmas nurses faced daily, as their professional obligations often clashed with the emotional needs of patients and families.

Interestingly, the more experienced the nurse, the more challenging it became to comply with the imposed regulations. In the realm of medicine, standardization through evidence-based practices and treatment protocols is paramount. However, the pandemic exposed the limitations of these standards, revealing them to be problematic, inflexible, and at times, even harmful in crisis situations (Richardson et al., 2020). As a result, nurses found themselves grappling with a system that often seemed out of touch with the real-world challenges they encountered, forcing them to balance professional integrity with the necessity of compassionate care.

Moral injury is a psychological trauma resulting from a betrayal of authority, of being forced to choose to break one’s moral code by the same people who should

guard the moral code (Shay, 2012). The clashing cognition involves psychological distress resulting from actions that are perceived as morally or ethically wrong, either by the individual or within the broader cultural or societal context. As the moral injury deepens, it becomes more than a discomfort of cognitive dissonance. The emotional and spiritual distress associated with the violation of one's moral code can result in a more profound and enduring impact on a nurse's well-being. As Rosen et al. (2022) argues, health care leadership must acknowledge that the problem is not the burnout of individuals, but of the system itself, which pushes the human element to the breaking point. Distressed nurses affect the whole system, they not only leave but they also deliver inadequate care, make medical errors etc. Burnout is a problem of an individual, and as such can be treated on a personal level. Moral injury is produced by a system, and as such, a repair needs to be from the top down.

8.6 Loss of humanity

“We did it to protect people, but in trying to protect people I think we forgot and lost people. We certainly lost our humanity; I don't think it was necessary. I don't think there's anything that can happen that we need to lose that. And I appreciate I can talk about this.” (Lauren, NZ)

The quote from Lauren, a nurse in New Zealand, poignantly captures the profound impact of the pandemic on the healthcare system and the caregivers within it. Foucault's concept of biopolitics illustrates how power dynamics exert control over bodies, and in this context, it highlights the tension between public health measures and the essential humanity of care.

During the pandemic, nurses reported a deep sense of loss—not just in terms of patient interactions but also in their ability to provide holistic care. The imposition of strict restrictions often prioritized safety over the human connections that are vital in healthcare settings. Nurses found themselves unable to communicate effectively through the usual means of speech and touch, which are crucial for establishing trust and rapport with patients. This erosion of interpersonal communication not only

hindered the healing process but also led to feelings of isolation and frustration for both caregivers and patients.

Many patients, facing their own fears and vulnerabilities, accepted these diminished experiences out of necessity. They prioritized their urgent medical needs, often at the cost of the compassionate care they would typically receive. This dynamic created a sense of disconnection and discontent, as nurses struggled to reconcile their professional roles with the limitations imposed upon them.

The overall sentiment expressed by nurses reflects a broader critique of the pandemic response—one that emphasizes the need for a more balanced approach that recognizes and preserves the humanity in healthcare. The loss of essential elements of care during this crisis has highlighted the importance of not only addressing physical health but also prioritizing emotional and psychological well-being for both patients and healthcare providers. As we move forward, it is crucial to learn from these experiences and strive for a healthcare model that values the human connection as much as it does safety and efficiency.

The power imbalance between patients and healthcare professionals, which existed prior to the pandemic, was exacerbated by these restrictions. Rudge and Holmes (2010) noted that “patients are complicit in this process, acquiescing to become a patient” (p. 125). The pandemic merely normalized this dynamic, paving the way for future global mandates, as suggested by the WHO. This raises critical questions: How will patients fare in this new order, and how can nurses remain in their roles when many feel unable to provide the care they were trained to deliver?

Cognitive dissonance among nurses increased significantly during the pandemic, as they grappled with the disjunction between their professional ideals and the realities of their work environment. Despite this, the rhetoric of care persisted, often voiced by those who enforced isolation and lockdowns that profoundly affected healthcare delivery, societal interactions, and economic stability. According to the CDC, health is defined as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (CDC, n.d., para 2). Similarly, the WHO states that “health is one of the fundamental rights of every human being

without distinction of race, religion, political belief, economic or social condition” (WHO, n.d., para 5). The 1978 Alma Ata Declaration emphasized that “health is a fundamental human right and the attainment of the highest possible level of health is a most important world-wide social goal whose realization requires the action of many other social and economic sectors in addition to the health sector” (WHO, 1978, p. 1).

However, the pandemic-related control measures undermined these principles. The experiences of individuals dying alone, giving birth without support, or being isolated from essential healthcare services starkly illustrate how mandated isolation contradicted the fundamental rights inherent to being human. These constraints not only impacted physical health but also led to significant emotional and psychological distress, highlighting the urgent need to reassess how healthcare systems can uphold the dignity and humanity of patients and providers alike in the face of future public health crises.

Upon the emergence of the SARS-CoV-2 (Covid-19), the WHO declared a state of pandemic. As mentioned previously, overnight, the world went into lockdowns, isolating people from society and, arguably, the airborne virus. The reality of the ever-present power was symbolized by ‘social’ distancing. Not ‘physical distance’ or ‘personal distance’, which would be normal, if it was describing a medical measure (Kheriaty, 2022). Fairchild et al. (2020) argued that social distancing constitutes an unusually egalitarian deprivation of liberty. It affects different subgroups disparately, it creates a ‘laptop class’ (Bhattacharya, 2022a), pinned against essential workers, who cannot isolate, so the others can. It became increasingly clear that a one-size-fits-all approach to public health measures could not adequately address the diverse realities faced by various segments of the population. People were trained to distance from each other, to see fellow human being as a risk (Dodsworth, 2021). Children were told they are dangerous for their grandparents (Saphier, 2021). Self-checking and checking of others were recommended, reporting unlawful gatherings, missing masks, breach of isolation, was required (Dodsworth, 2021; Frijters et al., 2021; Chaudhuri, 2022; Desmet, 2023). The polis was broken. The Agamben’s bios, the life of a citizen, was exchanged by ‘zoe’, the simple biological form of just surviving. Literally overnight the streets and shops fell silent, pubs were

empty, schools were closed, and universities shut their doors and sent people learning online, in isolation. The normal conversation between people was broken, a smile become invisible behind the mask, hugs become not only discouraged, but reportable and even punishable offence.

Three years later, the virus is still present, and societies and economies are broken (Duhatschek & Pauls, 2023). The results are that the poor just got poorer, the sick got sicker, and the people in power got richer (Santos, 2023). After 9/11 Annas, in 'Bioterrorism, public health, and civil liberties' warned that the 'Model State Emergency Health Powers Act' is a dangerous proposal, granting "broad, arbitrary powers to public health officials, without making them accountable" (Annas, 2002, p.1341). Public health can become the tool of techno-medical despotism in a 'state of exception', such as during a pandemic (Agamben, 2020a). In his 1976 work, "The History of Sexuality," Foucault explored how the nature of power shifted from the sovereign's ability to kill to a more nuanced control over life itself. This transition marked a significant change in the exercise of authority, where power became less about overt violence and more about managing and regulating the biological aspects of human existence.

With the rise of modern public health initiatives, the focus shifted toward ensuring the health and well-being of populations. Instead of simply wielding the power to punish or execute, authorities began to manipulate the conditions of life; implementing policies and practices aimed at controlling factors like birth rates, disease transmission, and overall public health outcomes. This involved an intricate web of surveillance, regulation, and intervention, highlighting how power could operate through knowledge and expertise rather than through fear alone.

Foucault's analysis underscores how contemporary governance has evolved to prioritize the management of life, reflecting a biopolitical approach where the focus is on optimizing health, productivity, and the overall functioning of society. This shift not only redefined the relationship between individuals and the state but also raised important ethical questions about autonomy, consent, and the boundaries of intervention in people's lives. In the context of the Covid-19 pandemic, we see this

dynamic at play, as governments employ public health measures to manage the population's health while navigating the complex implications of such power over individual freedoms and societal norms.

As mentioned, in February 2020, the WHO alerted the international community to an “infodemic” plaguing the world (Zorocostas, 2020). In April 2020, the WHO released a report titled "Managing the Covid-19 Infodemic: A Call to Action," declaring that the Covid-19 virus was accompanied by a massive spread of misinformation (WHO, 2020c). UN Secretary-General Antonio Guterres tweeted, “A tsunami of misinformation, scapegoating, and scaremongering has been unleashed” (Guterres, 2020 [Tweet]). Dr. Tedros, the WHO Director-General, called on all relevant stakeholders to increase their efforts to promote facts and science as the main means to counter misinformation. Social media companies were required to take action to address the Covid-19 infodemic (Bhattacharya, 2022d; Elisha et al., 2022; Shir-Raz et al., 2022), and search engines were instructed to monitor the traffic on their sites (Kheriaty, 2023).

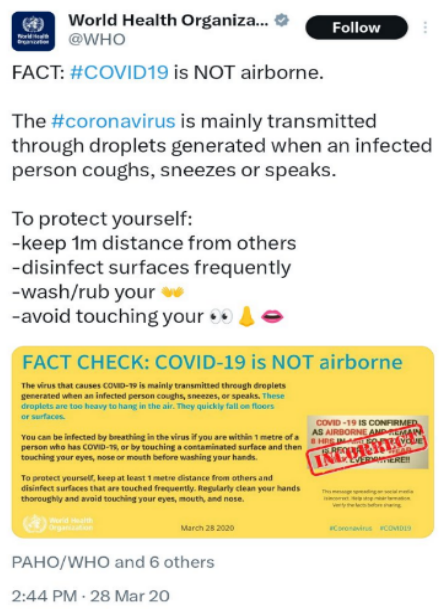


Figure 8-13: Covid-19 is not airborne

On March 28, 2020, WHO tweeted Covid-19 is not airborne (Figure 8-13). By July 2020, two hundred and thirty-nine scientists signed an open letter disputing the WHO official line and appealing to the international bodies to recognize Covid-19 as being airborne (Morawska & Milton, 2020). The data on airborne transmission were also discussed at the British Medical Journal on August 20, 2020, with the conclusion: “Controlling this pandemic is difficult when the fundamental science determining the response is misunderstood. Accepting the importance of airborne transmission may prove a crucial breakthrough and should not be delayed further” (Wilson et al., 2020, p. 5). In November 2022 Soumya Swaminathan, chief scientist at the WHO, stated that the organization should call Covid-19 airborne much earlier (Kupferschmidt, 2022). On February 10, 2023, an article ‘Coronavirus disease 2019 and airborne transmission: Science rejected, lives lost. Can society do better?’ (Morawska et al., 2023) reported on “the struggle of a large group of experts who came together at the beginning of the Covid-19 pandemic to warn the world about the risk of airborne transmission and the consequences of ignoring it. We alerted the World Health Organization about the potential significance of the airborne transmission of SARS-CoV-2 and the urgent need to control it, but our concerns were dismissed” (p. 1). The confusion in guidelines for health care workers, where WHO recommended contact and droplet precautions, while US Centre for Disease Control and Prevention (CDC) issued airborne precaution instructions, was discussed in a study by Bahl et al. (2022). The authors conclude, that for the safety of the health care workers airborne protective measures should be used while working with Covid-19 patients. By sending the wrong message and fact checking scientific debate WHO by default instructed hospitals to follow the wrong protective measures. Interestingly, droplet precaution requires a surgical mask, not N95, which is intended for airborne viruses. Nurses in Covid-19 wards were required to wear N95, as can be seen in numerous pictures and documentaries of the pandemic time. This would indicate the hospitals were going against the official WHO policy.

8.6.1 Conspiracy theory

“The constant lying is not aimed at making the people believe a lie, but at ensuring that no one believes anything anymore. A people that can no longer

distinguish between truth and lies cannot distinguish between right and wrong...with such a people, you can do whatever you want” (Arendt, 1951, p.79)

Arendt discussed the effects of propaganda and the manipulation of truth in totalitarian regimes, emphasizing how this erosion of trust in truth can lead to moral and ethical paralysis in society. I am not the only one struggling to make sense of the ridiculous Covid-19 era. As Engler, medical and legal expert of Hart and Panda groups, tweeted in his summary of the official narrative:

“The timeline associated with the early weeks of the Covid era stretches credulity. We are meant to believe that the following all happened spontaneously within a 4-week period:

- a) 27 Dec 2019 – Hubei hospital reports cases of pneumonia of unknown cause
- b) 7 Jan 2020 – the “new virus” is isolated
- c) 12 Jan 2020 – sequence uploaded to internet – from a patient in Wuhan with an otherwise unremarkable pneumonia
- d) 22 Jan 2020 – a dashboard purporting to report cases and deaths globally in real time is set up and launched by John Hopkins University
- e) 23 Jan 2020 – a paper describing a validated test (developed without access to patient material) is published, having been “peer-reviewed” within 24 hours of submission” (Engler, 2023 [Tweet])

The New England Journal of Medicine published an opinion piece “Responding to Covid-19 - A once-in-a-century pandemic?” by Bill Gates on 28 Feb 2020. As Engler (2024) further mentions, “Given that literally anyone questioning any of the establishment pandemic narrative was met with “what are you, a doctor, epidemiologist, virologist etc?” it is ironic that the NEJM published this opinion piece from Mr Gates, who is none of these things” (para 4). It is also interesting this article is discussing pandemic thirteen days before a pandemic was actually declared by WHO. Gates emphasised the need for efficient and effective vaccination, repeating what he tweeted just two-month prior Covid-19 appearance (Fig 8-14).



Figure 8-14: Vaccine plan in 2019

8.6.2 Silenced discussions

Knowledge is perceived as a freedom of mind, intelligence, observation, and judgment (Dewey et al., 1939). It is also seen as a protective tool for healthcare professionals during a pandemic (Savitsky et al., 2020; Savitsky, Radomislensky, et al., 2021; Sperling, 2021a; Sperling et al., 2022; Dubovi et al., 2022; Marey-Sarwan et al., 2022; Savitsky et al., 2020). As Foucault noted, knowledge is power (Foucault, 1973). Dr. Tess Lawrie stated at the World Council for Health conference on June 6, 2023, “Let us not be afraid of what we might find. It is often said that knowledge is power, but knowledge is also a freedom” (Health, 2023a).

In 1651, Thomas Hobbes argued in *Leviathan* for the sovereign state to have absolute power to censor dangerous opinions (Esposito, 2022). A few centuries later, misinformation was likened to a weapon of war by New Zealand Prime Minister Jacinda Ardern at the UN Assembly on September 24, 2022 (Ardern, 2022). In Orwell’s 1984, the protagonist Winston Smith wrote in his diary with a broken pen,

which could be considered false information. In the Soviet bloc, typewriters with copy ribbons were used to spread a mix of religious texts, anti-regime literature, and works by writers who had crossed the Iron Curtain and were deemed traitors. These hand-typed papers, smuggled among households, were officially labeled misinformation, disinformation, or fakes.

Today, we can share news and fake news with the click of a button, and we can delete and censor information just as quickly. However, without information, we cannot gain knowledge. Without knowledge, it is challenging to distinguish between information and misinformation. Knowledge is essential for making informed, rational decisions; it enables us to act correctly and move in the right direction. Ultimately, it represents the freedom to make informed choices.

The role of an open access and scientific collaboration during pandemic was discussed in several studies, article ‘Preliminary analysis of Covid-19 academic information patterns: a call for open science in the times of closed borders’ concluded a cooperation between countries in global pandemic is necessary, and called for FAIR data exchange, where all scientific information should be Findable, Accessible, Interoperable, and Reusable (Homolak et al., 2020). A rapid exchange of information could save life through scientific discussion and cooperation during pandemic. The use of blogs, podcasts and social media sites in science communication during Covid-19 was discussed by Fraumann and Colavizza (2022) and Ferreira et al. (2020). Nurses were reporting searching for information, sharing data with colleagues overseas, exchanging ideas and developing their knowledge. As Rosen et al. (2022) concluded, timely and accurate publication of scientific findings is a key component of the global response to the Covid-19 pandemic. A slow peer review process, pay wall publishing, combined with ‘fact checking’ prevented free flow of data. The pandemic “highlighted the problems of publishing. It’s expensive, slow, and reinforces journal articles being the accounting unit of scholarship. It’s not about contributing to scholarly conversation. It’s scholarly fanfaring of results that doesn’t align with the mission of science.” (Clark, 2023, p. 3).

Joy (NZ) perfectly summed up the official message the public received during the Covid-19 pandemic: *'there is no cure, just supportive care'*. Since there is no cure for the virus, stay at home, and come to hospitals only when it is absolutely necessary (Kennedy, 2021). Information about a possible cure was available on social media since February 2020, however 'The Trump' effect' brought on the ridicule of hydroxychloroquine and ivermectin treatments, as described in details by literature (Fox, 2023; Niburski & Niburski, 2020; Yagisawa et al., 2021). A survey on Tweet hashtags in 170 countries during Covid-19 pandemic concluded: "The name of US president, Donald Trump, appeared consistently in tweets across all countries" (Kausar et al., p. 419). US Senator Rand Paul in August 31, 2021 mentioned "hatred for Trump is blocking study of ivermectin"(Draft, 2021).

The story of 'Ivermectin: a multifaceted drug of Nobel prize-honoured distinction with indicated efficacy against a new global scourge, Covid-19' (Santin et al., 2021) is fascinating and illustrates well the oppression of information in the last three years. Figure 8-15 shows FDA warning against previously FDA approved Ivermectin, which in 2021 become 'horse medicine', unfit to humans. And two years later, on August 9, 2023, FDA Attorney Ashley Cheung Honold changed this decision: "The FDA explicitly recognizes that doctors do have the authority to prescribe Ivermectin to treat Covid" (Appeals, 2023, p.1). The division between people recommending Ivermectin as a part of Covid-19 treatment and an assistance with vaccination injuries, and others, who dismiss the 'horse medicine' and agree with government's ban on Ivermectin distribution, even for its intended purposes, continues (Bitterman et al., 2022; Fox, 2023; Henry, 2022; Popp et al., 2022). Doctors, who lost license for prescribing Ivermectin and HCQ are still waiting for their doctors' privileges to be reinstalled.



Figure 8-15: Ivermectin horse medicine

8.6.3 The clinical paradox

As I mentioned previously, discussions on social media about the importance of Vitamin D in Covid-19 patients began circulating as early as March 2020 (Argano et al., 2023; Assouline et al., 2021; Borsche et al., 2021; Doctor, 2021; Grant et al., 2020; Megna et al., 2022). The population in the sunny Middle East was reported to lack Vitamin D, according to studies from 2018 and 2019 (Chakhtoura et al., 2018; Lips et al., 2019). An Israeli study from September 2020, titled “The link between Vitamin D deficiency and Covid-19 in a large population” (Israel et al., 2020), concluded there was a strong association between Vitamin D deficiency and Covid-19. In light of the lockdowns, the recommendation that “populations should be urged to get more sunshine exposure in order to decrease Covid-19 risk” (p. 10) now seems somewhat ironic.

A preprint by Dror et al. from June 7, 2021, titled “Pre-infection 25-hydroxyvitamin D3 levels and association with severity of Covid-19 illness,” concluded that severity and mortality among hospitalized Covid-19 patients were associated with Vitamin D deficiency. This article underwent peer review and was published on February 3, 2022 (Dror et al., 2022). Another Israeli retrospective case-control study (Israel et al., 2022) compared 41,757 Covid-19 positive cases with a

control group of 417,570 individuals and supported the conclusion of a strong association between Vitamin D deficiency and “risk of SARS-CoV-2 infection and severe disease” (p. 1). Israeli nurses David (IL), Dianna (IL), and Dikla (IL) mentioned administering Vitamin D drops to Covid-19 patients.

On June 2, 2020, the Office of the Prime Minister’s Chief Science Advisor in New Zealand sent a recommendation on Vitamin D (OPMCSA, 2020), stating, “there is an observed overlap between several groups at risk for severe Covid-19 disease and groups at risk of Vitamin D deficiency” (para 2). The report discussed findings on Covid-19 and Vitamin D in detail, arguing that all the reports were preliminary and observational. However, since a survey from 2013 identified 27% of the New Zealand population as having insufficient Vitamin D, with at-risk populations including “people with naturally dark skin, people whose skin is not regularly exposed to sunlight (those who use sunscreen or wear concealing clothing or do not go outside), and people in the South Island” (para 8), it concluded that supplementing Vitamin D as a preventive measure was cost-effective until further studies could be conducted. This knowledge, however, was not communicated to hospitals. As Joy (NZ) reported: *“We just get treatment from the research, I mean using remdesivir. Before it was just supportive care. It’s a virus. Vitamin D we do not need; we are always outside.”*

On February 23, 2021, the “Best Practice Bulletin” for New Zealand doctors argued that “a blanket recommendation [of Vitamin D] is not appropriate. Nevertheless, it would seem prudent to ensure that going into winter this year, people who are likely to have low Vitamin D levels receive supplementation” (BPJ, 2021, n.p.). We can only speculate whether Vitamin D deficiency was a factor in explaining why serious Covid-19 disproportionately affected the Māori population. Megget (2022) noted, “Te Pūnaha Matatini research shows the risk of hospital admission from Covid-19 for a 40-year-old Māori and a 35-year-old Pasifika is approximately equivalent to the risk of hospital admission for a 60-year-old European” (p. 3). According to a study on the first Covid-19 outbreak in New Zealand, between February and May 2020, the risk of fatality for Māori was estimated to be 50% greater than for other New Zealand groups (Hendy et al., 2021). As Chaudhuri (2022) observed: “Like many other countries, New Zealand also preferred to get its expert

advice from a specific set of experts who were showered with non-contested government largesse in order to generate figures and statistics that conformed to the government's preferred narrative” (para 3). Vitamin D was not part of the official narrative. So this simple, inexpensive supplement was not recommended alongside kindness, social distancing, and masks.

8.7 *Primum non nocere* [first, do no harm]

Nurses were reported as the primary participants in vaccination drives. However, they lacked accurate information to provide to those receiving the vaccine. The available information was nebulous and vague at best, changing daily. Questions about the rigor of the research were dismissed in light of the urgent need to protect populations from a deadly virus. Given the challenges in accessing reliable information, many nurses took the initiative to seek out answers themselves, actively problem-solving through networking on social media, as noted by Marey-Sarwan et al. (2021). This approach led them to encounter a variety of information, sometimes conflicting with the accepted clinical narrative.

Participants in my study described their struggles to find relevant data and their need to exchange information to understand the situation better, receive guidance, and reassure their patients. The capillary effect of power not only explains the dissemination of the new normal throughout social and institutional contexts but also reflects the resulting distrust of those within the power system and rising suspicion among individuals. Foucault refers to these capillary fissures as disruptions that open up space for alternative narratives to emerge (Worthman & Troiano, 2016).

From the war on terror, where everyone could be a potential terrorist, we shifted to fear every individual as a potential plague-spreader. The pandemic started a trend, where a patient was seen as a bioweapon (Figure 8-16). The official message from a children's hospital informing parents to re-book their doctors' visit in case of their child being sick, is totally acceptable and normal. Is the hospital keeping the basic ancient dictum of medical ethics, '*primum no nocere*', first do not harm, by warning patients from seeking doctor's assistance? When the patient is seen as a

dangerous biohazard, compassion becomes complicated. In normal times one goes to the doctor when sick, now sickness is not allowed in the presence of health care professionals. If you are sick stay at home.



Figure 8-16: Patient is a bioweapon.

During the Covid-19 times people learned to discipline themselves and behave in expected ways. To challenge the power was not a matter of seeking to reach ‘absolute truth’, but “detaching the power of truth from the forms of hegemony, social, economic, and cultural, within which it operates at the present time” (Foucault in Rabinow, 1991, p. 75). The institution has normalised the discourses of the social order to accepting one truth. The noisy argument was gone, it has been hidden from view (Fairclough, 2015). Scientific debate disappeared. Different opinions on lockdowns, masks, vaccines, were simply deleted and suppressed from the mainstream. Power is the source of a social discipline and conformity. Foucault calls it the ‘disciplinary power’, the institutionalized reality of our everyday life. “We live in a society that has sacrificed freedom for security reasons and has hence commends itself to living in a perpetual state of fear and insecurity” (Agamben 2021, p. 18). Life

become a biological commodity, and being healthy is a duty for the collective good (Agamben, 2020). The word ‘obedience’ was rebuilt into ‘trust the science’ (Simons, 2021).

The controls over lives in the pandemic meant that freedom was conditional to compliance. Vaccine mandates, isolations and quarantine, control over movement, were all restraints imposed upon the world. Vaclav Havel’s ‘The power of the powerless’ describes the totalitarian method of imposing unity through fragmentation. People are virtue signalling the expected behaviour, it is a shield that protects them from potential informers, but at the same time makes people wary of each other (Havel, 2015). We do not know what people really think and as such cannot trust them. Being a bare survivor means living in insecurity, hearing non-stop fearmongering, while the goal posts of normalcy are shifting (Agamben, 2021; Horton, 2021; Saphier, 2021).

Already in 1920 Carl Schmitt warned: “Sovereign is he who decides the exception” (Schmitt, 2006, p. 16). The ‘state of exception’ declared worldwide allowed the massive response to Covid-19. The ‘state of emergency’ enacted throughout the world, including Israel and New Zealand, gave the governments the right to rule over day to day lives of its people. Citizens were being checked for compliance, as photo (Figure 8-17) taken in Jerusalem illustrates. The Covid-19 officer was checking the obedience of mask wearing on the bus, yet he himself was not wearing his mask correctly, since he is obviously not afraid of the virus. The power he had over the passengers was not challenged.



Figure 8-17: Covid-19 mask checking

The pandemic rules became a mockery, followed out of fear or as a part of virtue signalling. “The normalization of the extended surveillance poses risks and raises questions which should become the subject of ongoing, critical dialogue” (Couch et al., 2020, p.3). Through day to day messaging a deeper, more insidious transformations of personal habits and day-to-day interactions carried the manifestation of the true force of the power. As Agamben said: “The fear of losing one’s life can only serve as the foundation of tyranny. What happened in our society, where death lost their right to a funeral and where only the survivor had value. The hope for the future is possible only when we start to wonder, if the living as it is, is worth it....” (Agamben, 2021, p. 23). Or, as Lord Sumption commented on the cancellation of Christmas in 2020, “there is more to life than the avoidance of death” (Coggon, 2022, p. 1). He became even more radical, calling for civil disobedience during the cancellation of a second Christmas, arguing that “even in wartime, we never confined the entire population to their homes, 24/7” (Sayers, 2021, para. 2).

We have come full circle. In our hysteria for survival, we forgot to live. Agamben views biopower as coercive, sanctioned and normalized at a policy level. ‘Biosecurity’ becomes the new religion of health (Agamben, 2020). And fellow human beings become dangerous bioweapons. And there is no compassion when dealing with a biohazard. And we wonder with Lauren (NZ),” *I think, you know, with*

all of the best of intentions, sometimes I think we can look back on these things and say, was it really necessary?"

8.7.1 Panopticon – self surveillance

The Panopticon symbolizes an ideal disciplinary space where individuals self-regulate to avoid punishment. However, the actual re-education of the inmate population is failing; the prison merely compels a display of virtue and obedience to please the guards and the system. Foucault questioned whether it might be easier to let the lunatic run the asylum (1977). Kant's moral imperatives, 'Kultur', and the drive to "do good because it is good" are notably absent. This pervasive power spreads like capillaries, reaching every point and corner, constantly defining, redefining, and reinforcing what is considered normal, acceptable, and allowed.

Over time, people ceased to fear the virus but continued to self-regulate to avoid penalties. Agamben (2021) contemplates the future: "...once the emergency, the plague, is declared over, if it is—I do not believe that, at least for those who have maintained a minimum of lucidity, it will be possible to return to life as it was before. And this is perhaps the most desperate thing today" (p. 25). Bisiada (2021) posits that some view the Covid-19 pandemic as a trial run for the climate change emergency, emphasizing the significance of the debates and knowledge within our societies and how these discourses are mediated in social networks (p. 8).

Foucault's analyses of surveillance in *Birth of the Prison* and the medical gaze in *Birth of the Clinic* can be instrumental in deconstructing the Covid-19 narrative. Doctors lost their status symbols; the stethoscope was supplanted by point-of-care ultrasound (POCUS) (Sagy et al., 2021). In telemedicine, the medical gaze transformed into a virtual one (Bar-Lev, 2023). Within this Panopticon, those who tested positive for the virus faced blame and shame for their infection.

Living under constant surveillance fosters "a state of conscious and permanent visibility that assures the automatic functioning of power" (Foucault, 2002, p. 201). Electronic surveillance became a reality during the Covid-19 era. In March 2020, Israeli police were authorized to utilize mobile phone location data to ensure compliance with quarantine orders. By July 2020, the Israeli parliament approved a

bill allowing the Ministry of Health to use Shin Bet [secret service] intelligence to track individuals potentially exposed to Covid-19 (Polon, 2020). This raised “extremely serious questions” about privacy issues (Yom Tov, 2021, p. 3). Agamben (2021) highlighted the contemporary struggle between the right to live and the right to privacy.

The physical monitoring of the population, facilitated by police and military assistance in 2020, evolved into a virtual surveillance system characterized by digital vaccination passports. This digital biopolitics coexists with a digital psychopolitic that actively controls individuals, as “the virus isolates and individualizes us” (Byung-Chul, 2020, p. 2). The rules for healthcare workers differed, as noted by Katya (IL): *“If I was just a person from the street, there would be completely different rules; but as a nurse, my immune system is obviously very different.”* Essential workers were deemed indispensable in hospitals, and as such often considered immune to the virus’s risks.

Nurses working in Covid-19 departments in both Israel and NZ described 24/7 camera monitoring, even curtains were removed for a better infection control. The basic teaching from medical schools, that patients must be given privacy and maintain their dignity as much as possible, this basic teaching was gone. Patients became more and more dehumanized. The constant monitoring was seen as simply one more point in already abnormal situation. However, there was the more questionable surveillance of healthy people in isolation, the so-called application of ‘syndromic surveillance’ (Yom-Tov, 2021); surveillance of a general population with no trace of virus.

8.7.2 Lockdown’s side effects

“In the past six months we have witnessed a mass worldwide sacrificial event driven by a fear of the unknown and essentially an abandonment of post-Enlightenment thinking. We have been swept up in hysteria and the fanaticism of crowds. Our economy has been stabbed in the stomach.” (Testimony of prof. Gigi Foster for the PAEC at Victoria, Australia, on August 20, 2020)

The pandemic led to economic challenges, including job losses, business closures, and financial instability for many individuals and families (Foster, 2022;

Foster, 2023). Lockdowns and restrictions on movement contributed to disruptions in various industries, affecting people's livelihoods and economic freedom. Santos (2023) describes neoliberalism as the 'leading version of capitalism' that has created a permanent state of economic crisis. In this environment, Santos calls the Covid-19 pandemic, "a pandemic within a pandemic... which merely serves to worsen the crisis situation that has been affecting the world for decades" (p. 54). Thus governments, in Santos' view, made the virus the enemy to be fought by the government, and called for unity against the common enemy. Part of that compliance was the control over bodies, through lockdown, travel restrictions, changes to how education was delivered, and how health care was restricted and controlled (Agamben & Kotsko, 2020). Foucault's biopolitics was therefore alive and well.

Since biopolitics shifts the realm of power and governance from a strictly judicial framework to the domain of life, public health encompasses more than just individual health (Agamben, 2020). Agamben differentiates between 'zoe,' which refers to bare physical life, and 'bios,' the intelligent and conscious life of the citizen. He argues that the politicization of bare life can lead to the creation of a category of "life unworthy of being lived," where the quantity of life overshadows its quality (Agamben, 1998, p. 57). Furthermore, Agamben (2021) asserts, "As Foucault's work has shown, biopolitics tends fatally to morph into thanatopolitics, the governance of life through the regulation of death. As the law begins to address the biological life of citizens as a commodity that requires care, this interest inevitably takes a dark turn towards the notion of a life that is unworthy of life [*lebensunwertes Leben*]" (p. 81).

During the pandemic, the world stepped into dangerous territory, where health care professionals were publicly proclaiming their refusal to treat unvaccinated people. Articles such as, 'Treating the unvaccinated Covid-19 patient with compassion' (Jacob & Meah, 2022), where doctors needed to be reminded of their moral and ethical obligation to provide care, are a sad testimony of the time when Hippocrates oath left the medical profession. The change from selective care into eugenics is not impossible, as we saw in WWII's Aktion T4 involuntary euthanasia program in Nazi Germany. The current debate in Canada about Medical Assistance in Dying [MAID] law shows the complexity of the issue (Hartal, 2023). Regime creates

selective and exclusionary categories, where some have more rights and entitlement than others (Braidotti, 2022). Criteria for triage based on resource availability in the pandemic was discussed in literature and experienced by nurses on wards (Clarfield et al., 2020; Steinberg et al., 2020). Health care workers were chosen to receive the vaccination before others, receiving the ticket for living, since they were ‘essential’. All those rules created a category of dehumanized individuals, excluded from the privileges of obedient humans, the unvaccinated, the antivaxxers. Where is the line between Agamben’s ‘homo sacer’ (1998)¹¹ and Primo Levi’s muselmann? (1966).¹² As Nick Hudson commented: "Since the start of the Covid crisis, the world is suffering not so much from a pandemic, as from a deficit of thumos" (Hudson, 2022 [Tweet]). In Homeric poems thumos is associated with emotions, passion, volition, and motivation, and those were drained during the pandemic era (Desmet, 2022). In crisis we find comfort in our social connections. Bruria Adini argued that we lost this safety net, while socially distancing during the battle with the virus (Mero, 2022). Or, as Neil Oliver concluded: “The pursue for happiness is lost” (Oliver, 2023, para 2).

Mbembe (2003) concluded that biopower is inseparable from necropower: “The ultimate expression of sovereignty resides, to a large degree, in the power and the capacity to dictate who may live and who must die” (p. 11). Obedience is often rooted in the fear of death, with capital punishment representing the highest penalty. Yet, death manifests in various forms, including living death, civil death, and social death. Throughout the pandemic, Covid-19 death statistics became a grim daily reality, and governments exerted control over populations through fear of dying. As mentioned previously, lockdowns resulted in people dying alone, with burials subject to strict restrictions. One of the most poignant images from this period is of Queen Elizabeth II sitting alone, socially distanced from her family, at the funeral of her husband (Figure 8-18). How could we allow this?

¹¹ Homo sacer is the one who may not be sacrificed, yet may be murdered with impunity.

¹² A concentration camp prisoner on the edge of death, surrendered to their fate.



Figure 8-18: Queen Elisabeth at prince Philip's funeral

8.8 Cogito, ergo sum: Recommendations

“What is worrisome is not so much the present, but what comes after. Just as wars have left as a legacy to peace a series of inauspicious technologies, from barbed wire to nuclear power plants, so it is also very likely that one will seek to continue even after the health emergency experiments that governments did not manage to bring to reality before: closing universities and schools and doing lessons only online, putting a stop once and for all to meeting together and speaking for political or cultural reasons and exchanging only digital messages with each other, wherever possible substituting machines for every contact — every contagion — between human beings.” (Agamben, 2020, p. 8)

In concluding this thesis, I want to emphasize the critical value of information and open debate. Throughout the pandemic, nurses sought stability in their roles, along with open dialogue and effective leadership. My review reveals a consistent pattern of discursive practices: control over knowledge, regulation of healthcare provisions, restrictions on discussion, and oversight of social life. These impositions were largely dictated by a single global authority—the WHO—which positioned itself as the primary source of knowledge during the pandemic.

Rather than fostering debate and valuing the input of scientists and healthcare professionals, the WHO opted to suppress dissenting voices, framing them as ‘misinformation’ and contributing to what has been termed an infodemic (see Figure 8-19). This approach not only undermined the integrity of public discourse but also limited the ability of healthcare providers to respond effectively to the evolving challenges posed by Covid-19.

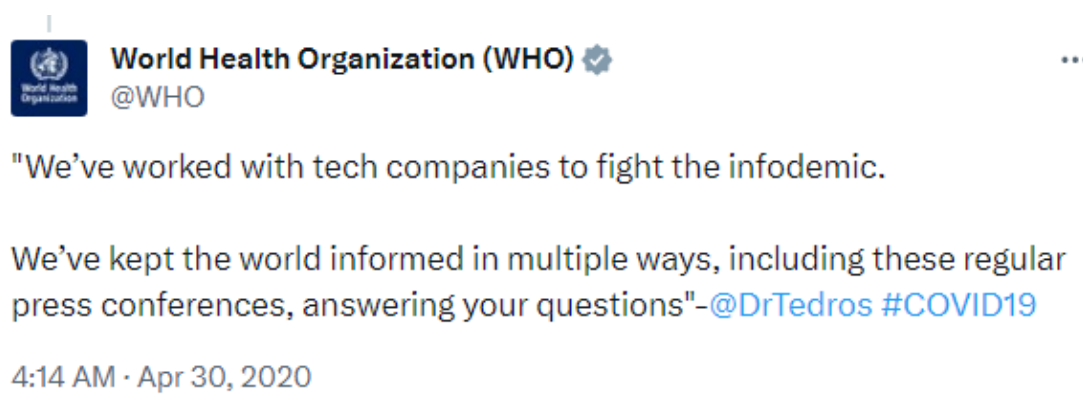


Figure 8-19: WHO fight the infodemic

Countering the prevailing narrative, Bisiada (2021) explored the infodemic through a model of epidemic psychology, concluding that the belief that social media solely fueled misinformation is misguided. Instead, he argued that “social interaction in a context of a volatile intellectual state can be seen as a discourse of knowledge production, conducted largely on social media,” emphasizing that this polarization stems from discourse practices rather than the social media technology itself (p. 7). In 2021, the International Council of Nurses called for nurses to be at the forefront of the new WHO global agreement on pandemic prevention and response (ICN, 2022, para 2). Currently, preparations for the next pandemic are underway, as highlighted by Bill Gates in his presentation, “How to Prevent the Next Pandemic” (Gates, 2023), and other experts (Tedros, 2023). The WHO has also stated that “the climate crisis is a new health crisis” (WHO, 2023 [Tweet]). A new WHO Pandemic Treaty is anticipated to be signed by many governments soon (Taylor, 2023). It is likely that the next pandemic will be managed similarly, with continued control over knowledge and the bodies of individuals.

8.8.1 WHO Treaty

The WHO treaty suggests that the best way to manage future pandemics is to centralize knowledge and decision-making processes. However, I argue that concentrating such power in the hands of the WHO could lead to an impersonal and dictatorial approach. We can examine how a centralized strategy worked during Covid-19. One advantage for Israel was its rapid patient transfer system, built upon an existing crisis and emergency management plan. The Home Front Command Center maintained up-to-date information on hospital capacities and could quickly dispatch ambulances to distribute Covid-19 patients across the country (Efrati & Breiner, 2021; Staff, 2020c). This circulation of patients was noted by Israeli nurses Kim (IL), David (IL), Dikla (IL), and Leanna (IL), and was also observed by me. Following the experience of isolated northern Italy, which struggled with overwhelmed hospitals during the first wave (Remuzzi & Remuzzi, 2020), and the alarming Covid-19 death statistics from New York in March and April 2020 (Hockett, 2023), Europe began preparing a plan for transferring Covid-19 patients between countries as early as October 2020 (France24, 2020; Operations, 2021). Timely care can save lives, and the WHO treaty has the potential to organize such patient distribution on a global scale.

However, reports from nurses in both New Zealand (Tamar, Elis) and Israel (Kim, Maya), along with media coverage, indicated that hospitals were at times empty while other medical teams felt overwhelmed (i24News, 2020). Transfers, even at the national level, were often disproportionate. Looking specifically at Israel, which has the knowledge, resources, and capacity to distribute patients during emergencies, it becomes clear that a centralized approach could be disastrous on an international scale. This thesis posits that it may be more important to strengthen local healthcare systems. Joy (NZ) highlighted the challenge of receiving Covid-19-positive patients from the islands, stating, “*they have nothing there—no equipment, no qualified staff.*” If hospitals on the New Zealand mainland are overflowing, where will they send patients under the new WHO treaty?

8.8.2 Scientific discussion

The role of open access and scientific collaboration during the pandemic, particularly the sharing of experiences and data, has been discussed in several studies. An article titled "Preliminary analysis of Covid-19 Academic Information Patterns: A Call for Open Science in Times of Closed Borders" concluded that information exchange between countries during a global pandemic is essential and called for FAIR data exchange, ensuring that all scientific information is findable, accessible, interoperable, and reusable (Homolak et al., 2020). Rapid sharing of information could save lives through open scientific discussions. The use of blogs, podcasts, and social media for science communication during Covid-19 was highlighted by Fraumann and Colavizza (2022) and Ferreira et al. (2020). Nurses reported actively searching for information, sharing data with colleagues overseas, exchanging ideas, and developing their knowledge.

As Rosen et al. (2022) noted, the timely and accurate publication of scientific findings is a crucial component of a global crisis response. However, slow peer review processes, paywall publishing, and 'fact-checking' often hindered the free flow of data. The pandemic underscored significant publishing issues: "Expensive, slow, and reinforcing journal articles as the accounting unit of scholarship. It's not about contributing to scholarly conversation; it's scholarly fanfaring of results that doesn't align with the mission of science" (Clark, 2023, p. 3). Since the onset of the Covid-19 pandemic, scientists have been advocating for data transparency. Peter Doshi, a senior editor at BMJ, emphasized that "there is no science without data" (Doshi et al., 2022, para 2). In an open letter to the CEOs of Pfizer and Moderna, Doshi et al. (2022) called for immediate availability of data, asserting that "widespread use of interventions without full data transparency raises concerns over the rational use of Covid-19 vaccines" (Tanveer et al., 2022, p. 2). Currently, most available data are being obtained through Freedom of Information Act requests.

Nursing theorist Eriksson (2007) described health as the experience of wholeness; being healthy encompasses the holistic integration of body, soul, and spirit. According to Eriksson, health is the goal of professional caritative caring and

depends on each individual's perspective, culture, interests, and competencies (Bergbom et al., 2021b). Nurses are expected to practice according to evidence-based medicine. We are obliged to continually learn, stay updated on the latest data, and ensure that doctors make no mistakes in their prescriptions, as it is the nurse who administers medication to patients. Nurses must identify problems, question the validity of treatments, and have the courage to confront doctors when patient wishes are not respected. We must ask questions, always ask questions, because, quite literally, lives depend on it.

I have highlighted the discursive discourse on how knowledge and power has been used (and abused) during the three years of the pandemic. I have shown how knowledge has not supported practice, and nurses have suffered because they do not have reliable guidance; in fact, the guidance has changed often, without logic. Whilst the WHO Pandemic treaty has been marketed as good, and the only effective way to manage a future pandemic, the excitement of a global WHO control over a pandemic, is mediocre, with many countries not keen to sign up to something that challenges their country's sovereignty and freedom. Additionally, in a recent article in the *British Medical Journal*, Taylor (2023) warned against the treaty because it would harm Pharma company profits. Despite setting a deadline for approval of the Treaty for May 2024, negotiations have stalled, with countries questioning the intent of the Treaty, raising concerns about economic, sovereign, and social issues (Daniel, 2023). Let's hope WHO will be able to learn from the mistakes that happened on the global scale and the plan for the next pandemic will draw from the experiences of the people working in the field. At the moment, the only clear directives are the need to censor information and monitor discussions on social media.

Although the pandemic has clearly exacerbated organisational workforce attrition rates, research continues to highlight an underlying organisational ethical climate that suggests that the capacity of nurses to provide good care is undermined by organisational policies that go beyond dealing with a pandemic, and in fact, the moral distress nurses experience every day is a significant factor in the increasing attrition rates. There are concerns that nurses were left out in the cold regarding the support they deserved from their health services during the pandemic and are

choosing to leave the profession to preserve their mental health and wellbeing (Labrague et al., 2020; Lopez et al., 2022). In a letter to British Medical Journal, Dr David Berger argues that as long as “the implication is generally accepted that health care workers have an unequivocal moral obligation to treat patients, irrespective of any risk to themselves, then governments are conveniently released from the obligation to provide a safe workplace” (Berger, 2021, p.2). Thus, it is important to identify the extent to which organisations were responsive to the needs of already morally stressed nurses. This thesis asks if ‘top down’, ‘command and control’ health care system take care of its nurses.

8.9 Limitations: What I did not realize

When I was searching for articles on nurses’ experiences, my initial keywords did not include "moral distress" and "moral injury." I didn’t anticipate that these concepts would emerge as significant themes in the narratives shared by the nurses I spoke with; they turned out to be crucial underlying factors in their experiences during the Covid-19 pandemic. Through my field research, I discovered that these terms encapsulated the profound emotional and ethical challenges nurses faced as they navigated the complexities of patient care amid unprecedented circumstances.

My findings are bolstered by insights gained from social media discussions, where numerous healthcare professionals shared their testimonies about the detrimental effects of pandemic responses. This widespread dialogue is reflected in current inquiries and discussions, such as the 'Questions for a Covid-19 Commission' in the UK (Group, 2023), the National Citizens Inquiry in Canada (@Inquiry_Canada), An Inquiry into Australia’s Excess Mortality (@AMPS_RedUnion), and the International Crisis Summit in the EU Parliament (ICS, 2023). Additionally, various academic papers delve into these themes (Gibson, 2022a; Ioannidis et al., 2022; Maher, 2022; Thakur & Redman, 2021), highlighting a growing recognition of the issues at hand.

However, my research has its limitations, particularly regarding language use. I primarily focused on English-language data, with only a few exceptions for Hebrew

tweets. This choice reflects a broader issue noted by Homolak et al. (2020): during the pandemic, the rapid exchange of information was hampered by language barriers. Significant discussions containing vital data occurred in non-English languages, which limited their accessibility to many people globally.

Another critique of my methodology could stem from the nature of discourse analysis itself, which is closely tied to spoken and written language (Fairclough, 2010). My nurses communicated with me in English, while for half of them English was not their first language. They often had to navigate a landscape of medical terminology, emotional expression, and cultural references that may not translate seamlessly into a language that isn't their mother tongue. This situation could result in a more simplistic or generalized use of vocabulary, potentially obscuring the richness of their insights. Additionally, the pressure of discussing sensitive topics such as moral distress and emotional trauma in a non-native language might have led some to understate their feelings or experiences. They may have struggled to find the exact words to convey their thoughts, which could affect the clarity and impact of their narratives.

This language barrier highlights the importance of being attentive to the context in which these conversations took place. While the nurses were earnest and open in sharing their stories, the limitations of language could mean that some critical aspects of their experiences went unexpressed or were lost in translation. Recognizing this limitation is essential for understanding the full scope of their insights and experiences during the pandemic. It also underscores the need for ongoing dialogue in a supportive and accessible manner, ensuring that all voices can be heard and valued, regardless of language proficiency.

Nevertheless, one of the strengths of this study is its incorporation of an ethical critique, as articulated by Fairclough and Fairclough (2018). I aimed to approach this research with sensitivity and awareness, drawing from Martinsen's (2006) metaphor of "seeing with the heart eye." This contrasts with a more detached, reporting eye, which can reduce complex human experiences to mere data points. By engaging in ethical reflection, I sought to honor the voices of the nurses and the emotional weight

of their narratives, acknowledging the profound moral challenges they faced during the pandemic. This approach not only enriches the analysis but also contributes to a more compassionate understanding of the realities of nursing practice in crisis situations.

8.10 Conclusion: J'accuse

The pandemic brought conflicting situations, where a cognitive dissonance, leading to moral injury and further on to burnout, became an everyday reality. When I started my research in 2020, I expected to find anxiety, depression, stress. Instead, I found nurses being let down by the system, not allowed to fulfil the basic duty of care, which is to care for the patient in the best way possible. This process of system crisis started before Covid-19, it just became more visible, more prominent, during the pandemic. As Joy (NZ) said, we are becoming too cynical. In an environment, that feels 'like an army' (Katya, IL).

The clash between ethical and moral code and everyday reality became the norm. It is a system, where we were told to do one thing, while witnessing the authorities doing the opposite. Maya's (IL) grandmother had to stay alone during the holidays, in accordance with the official rules, while the rule-makers were celebrating together. Systems, where an adjustment to illogical policies is necessary, where Katya (IL) prefers not to report her positive PCR, Kim (IL) is told by MoH not to go to isolation while at the same time, based on the same policy, she is prohibited to work. It is a world where Anna (NZ) is dealing with a lack of guidance and with being blocked from acquiring PPE for her staff, while Max (NZ) reports abundance of equipment a few kilometres away. Simply, there is no strength left to pull up the ambulance at the bottom of the cliff. We are running in circles, trying to extinguish the big fires knowing the whole forest is burning. Our story is one of a disposable hero, who is extremely exhausted and injured to do our duty and help others.

As a final comment I would like to quote Agamben's hope for the humankind of being able to rise from the pandemic's ashes like the mythologic phoenix:" We reject with equal conviction the mute and faceless bare life and the health religion that governments are proposing. We are not awaiting either a new god or a new human

being. We rather seek, here and now, among the ruins around us, a humbler, simpler form of life. We know that such a life is not a mirage, because we have memories and experiences of it..." (Agamben 2020, p. 97).

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Appendix 1: Academic articles

9.1 Articles related to Israel

Author, date	Title	Methods	Findings	Conclusion / Recommendations
(Bashkin et al., 2021)	Changes in smoking behaviour, stress, and sleep duration among Israeli hospital workers during the Covid-19 pandemic: A cross-sectional study	Online survey, 920 healthcare workers (304 nurses)	Suggestion smoking could be coping mechanism	Offering stress-management skills and coping strategies, mental health support.
(Bar-Zeev et al., 2022)	Nurses' perceptions of social rejection, resilience and well being	National online study, 247 nurses - a comparison between nurse in covid and non-covid wards	Loneliness and depression reported, wellbeing was low during covid; less social rejection in nurses not working on covid ward.	A support of resilience tools is needed
(Benbenishty et al., 2022)	Israel ad hoc Covid-19 committee: Guidelines for care of older persons during a pandemic	Policy for community and long-term institutions	Triage and palliative care could be necessary, special criteria needs to be established	Senior nurse should be a part of triage group in case of resource shortage.
(Clarfield et al., 2020)	Sleep difficulties among Covid-19 frontline healthcare workers	A cross-sectional self-reporting questionnaire of 189 physicians and nurses working in designated Covid-19 wards, comparison was done with 643 health care workers in non-covid wards	Covid-19 workers reported greater sleep difficulties to non-Covid-19 workers	“Future research is needed to elucidate the long-term trajectories of sleep difficulties among HCW during large scale outbreaks, and to identify risk factors for their persistence” (p.73)

Author, date	Title	Methods	Findings	Conclusion / Recommendations
(Cleper et al., 2022)	The impact of Covid-19 on long-term care facilities and their staff in Israel: Results from a mixed methods study	A survey of 52 facilities, closed- and open-ended questions. Mixed methods were used to analyse data both quantitatively and qualitatively.	Decline in mental health of staff, increase of extra duties, and financial difficulties due to fewer residents admissions.	Guidelines and support are needed
(Cohen-Mansfield, 2022)	Who helped long-term facilities and who did not during Covid-19? A survey of administrators in Israel	Online and phone questionnaire	Shortages of nursing aids and personal protective equipment	Findings highlight the need for a more coordinated, systematic and comprehensive approach to assist facilities
(Cohen-Mansfield & Meschiany, 2022)	Shared trauma during the Covid-19 pandemic: Psychological effects on Israeli mental health nurses	An online survey, 183 mental health nurses working in mental health services in Israel.	Higher religiosity was associated with higher resilience, and higher professional seniority was related to higher posttraumatic growth Positive correlation with positive messages from to down	Attentions should be given to non-Israeli born nurses, they may need more support
(Dahan et al., 2022)	Workplace Violence against Hospital Workers during the Covid-19 Pandemic in Israel: Implications for Public Health	A cross-sectional online questionnaire with 486 workers at a government hospital in Israel	Increased workplace aggression, especially towards nurses and doctors	Developing violence reducing strategies is needed
(Dopelt et al., 2022)	Facing the unknown: Healthcare workers' concerns, experiences, and burnout during the covid-19 pandemic— a mixed-methods study in an Israeli hospital	Mixed-methods online survey, 263 hospital staff and 10 semi-structured, in-depth interviews with physicians, nurses, and medical technologists working on coronavirus wards	Nurses reported more burnouts compare to other health care workers. High level of concerns for family. .	Mental resilience should be strengthened

Author, date	Title	Methods	Findings	Conclusion / Recommendations
(Dopelt et al., 2021)	A multi-level examination of nursing students' resilience in the face of the Covid-19 outbreak: A cross-sectional design.	Undergraduate nursing students of five universities, 492 participants completed the online questionnaire.	Meaningful involvement in pandemic increases resilience	Nursing students are important resources and should be assisted to maintain their mental health
(Drach-Zahavy et al., 2022)	The role of science-based knowledge on the SARS-CoV-2 virus in reducing Covid-19-induced anxiety among nurses	A two-part cross-sectional study, an online questionnaire 562 registered nurses, nursing students, and the general public	Knowledge may protect anxiety	Ongoing education programs and training are recommended
(Dubovi et al., 2022)	Ethical challenges of nurses in Covid-19 pandemic: Integrated review	8 articles mentioning ethical challenges were analysed	Moral distress due to resources allocation, nurse's duties and safety and the possibility of providing care	'Nurses are still facing various ethical challenges across the globe. Therefore, it is important to mobilize resources and invest in nurses to bring long-lasting solutions.' (p.5)
(Findling et al., 2021)				
(Gebreheat & Teame, 2021)	A Covid-19 call center for healthcare providers: dealing with rapidly evolving health policy guidelines	The call center operated from February 5, 2020 to May 14, 2020 Data on calls received were analysed.	Explanation of changing guidelines is crucial.	Call centre which would provide a unified guidelines is recommended
(Gibson, 2022a)	The organizational atmosphere in Israeli hospital during Covid-19: concerns, perceptions, and burnout	Cross-sectional study of 547 hospital staff, online survey, Soroka University Hospital	Concerns about pandemic's management	Programs providing financial, psychological, and social support and wellbeing are needed

Author, date	Title	Methods	Findings	Conclusion / Recommendations
(Glatman-Freedman et al., 2020)	Nurses' perceptions of the role of health organisations in building professional commitment: Insights from an Israeli cross-sectional study during the Covid-19 pandemic	Online study, 817 community and hospital nurses.	Organizations guidelines are changing and proper explanation of what is required is missing	Training and emotional support are recommended
(Goldfarb et al., 2021)	The communication challenges and strength of nurses' intensive corona care during the two first pandemic waves: A qualitative descriptive phenomenology study	22 nurses in online interviews	PPE is a barrier to communication with patients	Simple language for communication is recommended
(Green, Sharon, et al., 2022)	Fighting for life and losing: Intensive care unit nursing staff's experience with Covid-19 patient deaths during the fist two waves: a qualitative study	24 ICU nurses' online interview	High death toll of patients had negative effect on nurses	Counselling and support management is recommended
(Green, Gendler, et al., 2022)	The psychosocial impact of quarantine due to exposure to Covid-19 among healthcare workers in Israel	A cross-sectional online study, 148 quarantined health care workers	Shame over being in isolation was reported as well as stress from being separated from families	Workers in quarantine should be supported

Author, date	Title	Methods	Findings	Conclusion / Recommendations
(HaGani et al., 2022)	Exploring midwives' coping and functioning in the labour wards during the Covid-19 pandemic from the labour ward Head nurses' perspective: A qualitative study	A qualitative study, semi-structured interviews done over the telephone. 13 head nurses from labour wards	Stress, fear and anxiety were the main issues reported. Coping mechanism mentioned was sharing and feeling of 'job well done'	Proper understanding of the pandemic effects of workers would assist in developing appropriate helping tools.
(Halperin et al., 2022)	Psychological distress and perceived job stressors among hospital nurses and physicians during the Covid-19 outbreak.	Cross-sectional design, 172 nurses and physicians working at a medical centre, self-report questionnaires.	Higher experience and seniority at work were protective factors	"There is a need to monitor and share helpful coping strategies. Policymakers would be wise to provide a platform to address hospital nurses and physicians' mental health." (p.45)
(Hamama et al., 2022)	Experiences and psychosocial predictors of professional function among intensive care nurses under the shadow of Covid-19: A mixed-methods study	Qualitative data, 15 senior managerial nurses. A structured questionnaire among 100 staff nurses working in 5 ICUs.	Burnout, emotional stress and anxiety reported	Importance to address burnout was stressed.
(Kagan et al., 2022)	The moderating effect of care-burden on formal caregiver's mental health during Covid-19	A cross-sectional online survey. 400 formal caregivers completed a questionnaire.	Anxiety, burnout and stress reported	"Professionals may use ADL/IADL as a practical index to assess care burden and the risk of mistreatment." (p.14)
(Karni-Efrati et al., 2022)	Job burnout among Israeli healthcare workers during the first	98 healthcare workers completed an online survey.	Distress and anxiety were linked to burnouts	A significant role of maladaptive emotion regulation tendencies, specifically trait worry, in

Author, date	Title	Methods	Findings	Conclusion / Recommendations
	months of Covid-19 pandemic: The role of emotion regulation strategies and psychological distress			job burnout among healthcare workers. These findings have implications for both the assessment and treatment of healthcare workers.
(Khouri et al., 2022)	“You Killed the Hospital, They Have No Place Left”: The Experience of Nursing Home Multidisciplinary Staff in Israel during the Covid-19 Pandemic	6 in-depth online focus groups consisting of 21 multidisciplinary staff members from 14 Israeli nursing homes	Disconnect due to feeling of abandonment from the health care organisations	“Findings indicate the importance of creating a climate that facilitates mutual sharing, listening and learning” (p.13)
(Lev & Dolberg, 2022)	It's like we're at war”: Nurses’ resilience and coping strategies during the Covid-19 pandemic.	18 nurses were interviewed.	Military language use as a coping mechanism	Support groups to share feelings and experiences are recommended
(Marey-Sarwan et al., 2022)	Practices and experiences of European frontline nurses under the shadow of Covid-19.	Qualitative narrative research study. 18 nurses from 8 European countries	Emotional and ethical challenges were mentioned	Management needs to react to the pandemic challenges
(Melnikov et al., 2022)	Factors affecting the professional functioning of health care workers during the Covid-19 pandemic: A cross-sectional study	Cross sectional study, 115 health care workers	Job satisfaction was a protective factor	Clear guidelines are recommended

Author, date	Title	Methods	Findings	Conclusion / Recommendations
(Melnikov et al., 2022)	Comparison of hospital worker anxiety in Covid-19 treating and non-treating hospitals in the same city during the Covid-19 pandemic	An electronic questionnaire survey among workers of the covid and non-covid treating hospitals	Treating Covid-19 patients did not increase anxiety among health care workers	Risk groups were identified, and support recommended
(Milgrom et al., 2020)	The association between witnessing patient death and mental health outcomes in frontline Covid-19 healthcare workers	A self-report survey, administered in a large tertiary hospital completed by 828 HCW (42.2% physicians, 57.8% nurses)	“Witnessing patient death at the Covid-19 wards was associated with a four-fold increased likelihood of PTSS compared with the non-Covid-19 wards” (p.2)	“Findings suggest that helping HCW cope with Covid-19 related deaths might reduce their risk of posttraumatic stress.” (p..8)
(Mosheva et al., 2021)	Differences in levels of psychological distress, perceived safety, trust, and efficacy amongst hospital personnel during the Covid-19 pandemic	A survey to nurses, physicians, interns, and administrative and logistical staff at an acute-care hospital A total of 716 hospital personnel completed	Nurses reported higher levels of psychological distress and lower levels of trust in the hospital's Covid-19 guidelines compared to physicians. Nurses and interns felt the least safe when working in the hospital. Nurses reported the highest levels of concern regarding fear of uncontrollable spread, infection, and family transmission of the virus.	Support from management is recommended
(Nissan et al., 2021)	Nursing Students in Crisis Mode: Fluctuations in Anxiety during the Covid-19-Related Lockdown	244 first-to fourth-year nursing students completed 2 surveys conducted during the initial lockdown and 5 weeks later	Mental disengagement was associated with higher anxiety and stress	“The pandemic created unparalleled stressful situations for nursing students. Faculty should have heightened awareness of these stressors and act to implement innovative resolutions for the problems that arise.” (p.4)

Author, date	Title	Methods	Findings	Conclusion / Recommendations
(Rosen, Waitzberg and Israeli, 2021)				
(Savitsky, Findling, et al., 2021)	Anxiety and coping strategies among nursing students during the covid-19 pandemic	A cross-sectional study, 244 students in the nursing department.	Fear of infection and lack of PPE recommended. Challenges to balance work and studies during pandemic	Stable environment and engaging online classes are recommended
(Savitsky et al., 2020)	Nurses' occupational satisfaction during Covid-19 pandemic	Cross-sectional study of 130 Israeli nurses	Nurses working in the community had higher occupational satisfaction than those working in hospitals; nurses who took care of patients who tested positive for Covid-19 had significantly lower occupational satisfaction. Increased workload as a result of staff shortages was not associated with lower occupational satisfaction.	Even under the circumstances of the pandemic, the most important nurses 'occupational values are worthwhile accomplishments, importance of professional challenge, diversity and interest in the job, personal growth and development and independence in their practice.
(Savitsky, et al., 2021)	Ethical dilemmas, perceived risk, and motivation among nurses during the Covid-19 pandemic	A descriptive correlative study using a 53-section online questionnaire including 4 open-ended questions complete by 231 registered and intern nurses	Strong commitment to care. "The nurses did not hold a utilitarian approach to resource allocation, thereby acknowledging the value of all people and their entitlement to care, regardless of optimal outcomes" (p. 11).	Supportive climate in hospitals is recommended
(Sperling, 2021a)	Nurses' challenges, concerns and unfair requirements during the Covid-19 outbreak.	A descriptive correlative study using a 53-section online questionnaire including 4 open-ended questions complete by 231 registered and intern nurses.	Nurses raise important issues concerning their relationships with employers and family members, and significant insights regarding the pandemic and their revised responsibilities and definition of work. They raise serious	"Health managers should find ways to enhance the ethical climate and institutional support to enable a better work-life balance in times of pandemic and support nurses' working needs and labour rights." (p.60)

Author, date	Title	Methods	Findings	Conclusion / Recommendations
			concerns regarding their rights at work and their standing for them.	
(Sperling, 2021b)	The impact of Covid-19 on people using and providing long-term care in Israel	Paper for International long term care policy network	The national project called "Mothers and Fathers Shield" under home front command was developed	Regulations for workers (bubble work, testing, minimal contact with residents)
(Tsadok-Rosenbluth et al., 2020)	Academic self-efficacy, resilience and social support among first-year Israeli nursing students learning in online environments during Covid-19 pandemic.	A cross-sectional survey design on a sample of 222 undergraduate first-year Israeli nursing students	Academic self-efficacy served as a protective tool	Nurse education should provide a supportive atmosphere in classrooms
(Warshawski, 2022)	Evaluation of Israeli healthcare workers knowledge and attitudes towards the Covid-19 vaccine	714 participants in cross sectional online survey, with 32% nurses	High level of knowledge was observed.	"Sufficient and accurate information and good public health messaging is needed to enhance compliance and uptake of the vaccine among health care workers" (p.69)
(Zaitoon et al., 2022)	The effect of Covid-19 pandemic on the emotions of nurses in Israel	203 nurses working in hospitals and in the community	Community nurses reported more positive aspects of work than hospital nurses, who were more stressed	Hospital nurses need a place to share their feelings and wellbeing programs are recommended
(Zelevich et al., 2021)	Self-efficacy, uncertainty, and anxiety among nursing graduates in response to licensing test postponement due to the Covid-19 pandemic: A mixed-methods study	352 graduates of nursing education programs participated in this mixed-methods study using an online questionnaire.	Anxiety about nursing examinations. Graduates that worked during studies were more confident about their success.	"Granting a temporary permit for employment as a nurse following the postponement of a licensing test contributed to the ability of nursing graduates to cope with the situation. Policies to deal with similar situations in the future emergencies should be developed and implemented." (.35)

Author, date	Title	Methods	Findings	Conclusion / Recommendations

9.2 Articles related to New Zealand

Author, date	Title	Methods	Findings	Conclusion / Recommendations
(Clark et al., 2021)	Frontline nurses' sensemaking during the initial phase of the Covid-19 pandemic in 2020 Aotearoa New Zealand	A national mixed methodology, 29 nurses interviews via Zoom and telephone.	Nurses felt isolated, stressed about their own families. Coping mechanism – work satisfaction	“The study highlights that organisational culture, communication, and clinical leadership either fractured or strengthened nurses' professional commitment” (p.118)
(Cook et al., 2021)	When Maintaining Relationships and Social Connectivity Matter: The Case of New Zealand Midwives and Covid-19	A qualitative content analysis of NZ media articles	Stress and exhaustion reported, as well as feeling a lack of appreciations	Appreciation is needed on government and hospital levels
(Crowther et al., 2021)	Supporting the needs of people with intellectual and developmental disabilities 1 year into the Covid-19 pandemic: An international, mixed methods study of nurses' perspectives	369 nurses across North America, Europe, Australasia (21 nurses, not specified NZ numbers). 52 items online questionnaire	Challenges of daily routine changes as well as discrepancies in policies	Support for nurses in isolation is needed
(Davis et al., 2021)				
(Desroches et al., 2022)	Designing for transition: Supporting teachers and students cope with emergency remote education	Two cohort groups of first- and second-year students enrolled in the Bachelor of Nursing, 300 students in total and 27 academics and tutors	Teachers developed variety of strategies for students during challenging times	Tools for a learning in community needed

Author, date	Title	Methods	Findings	Conclusion / Recommendations
(Green et al., 2020)	Are human resource practices the key to managing job burnout in New Zealand nurses? Testing a path model	Using cross-sectional data from 114 New Zealand nurses	Meaningful work as a protective factor	Work and life balance needs to be supported
(Haar & Mowat, 2022)	Impact of the coronavirus disease 2019 pandemic on critical care healthcare workers' depression, anxiety, and stress levels	Anonymous online survey. 3770 responses, 3039 (80.6%) from Australia. Nurses made up 2269 (60.2%) with most, 2029 (53.8%) working in ICU	Women reported higher stress levels. Overall, 24-29% workers reported stress and anxiety	“Female gender appears to play a role in anxiety, modifiable factors also contribute to psychological burden, and should be studied further” (p.8)
(Hammond et al., 2021)	The long-term care pandemic: International perspectives on Covid-19 and the future of nursing homes	Analysis of records from Canada, Finland, New Zealand and the US for profiles of nursing home residents and home care clients.	Pride at work, camaraderie as a protective factor	Wellness initiatives are recommended
(Hirdes et al., 2020)	Community healthcare workers' experiences during and after Covid-19 lockdown: A qualitative study from Aotearoa New Zealand	Qualitative nationwide in-depth interviews with 15 registered nurses employed in community settings, two community midwives and five personal care assistants.	Loneliness, isolation and stress reported.	There is a need for a support, being ‘hero’ is nice label, but more practical solutions are needed to nurse’s stress
(Holroyd et al., 2022)				

Author, date	Title	Methods	Findings	Conclusion / Recommendations
(Hughes et al., 2021)	Covid-19 Lockdown in New Zealand: Perceived Stress and Wellbeing among International Health Students Who Were Essential Frontline Workers	Quantitative and qualitative data were collected by purposeful sampling of 43 health care students	Students played critical role during pandemic and feeling useful provided a protective factor.	Students need to be supported by administration and educational institution.
(Jagroop-Dearing et al., 2022)	New Zealand emergency nurses' perspectives and experiences of professional joy in clinical practice: An exploratory qualitative study	A qualitative, descriptive, semi-structured interviews with 6 registered nurses from two New Zealand emergency departments.	Sharing experiences with colleges was a protective factor	Joy is an important factor and 'circles of joy' should be encouraged
(Leaf & Murray, 2022)	A randomized trial of probiotic supplementation in nurses to reduce stress and viral illness	Eligible participants were registered nurses working in a clinical environment anywhere in New Zealand	Stress and viral illness symptoms reduced during the study for all participants. However, this could be related to decline in Covid-19 numbers.	"Study highlights the challenge in controlling environmental factors in human trials." (p.4)
(Slykerman & Li, 2022)	Improvement in the psychological health of nurses working during the Covid-19 pandemic	484 nurses answered questionnaires twice, after 12 weeks period to examine changes in stress	A potential beneficial effect of effective public health management of the Covid-19 pandemic on nurses' stress and psychological wellbeing was seen	Younger nurses had high anxiety level and as such need to be supported
(Slykerman et al., 2022)	Experiences of New Zealand registered nurses of Chinese ethnicity during the Covid-19 pandemic	An anonymous online questionnaire, 51 New Zealand registered nurses of Chinese ethnicity working through the Covid-19 pandemic.	Racial discrimination and bullying reported	Chinese nurses are important part of NZ work force and need to be supported

Author, date	Title	Methods	Findings	Conclusion / Recommendations
(Song & McDonald, 2021)	The Covid-19 pandemic: Analysing nursing risk, care and careers capes	In-dept interviews with 18 nurses	Not enough appreciation for nurses	Acknowledgement on management and state level recommended
(Thompson et al., 2022)	Job satisfaction and symptoms of depression, anxiety, stress, and burnout: A survey of Australian and New Zealand intensive care research coordinators	An online anonymised survey was distributed to 128 Intensive Care Research Coordinators	20% RN experienced depression, anxiety, or stress symptoms, with close to half reporting signs of burnout.	Action is necessary to retain workers
(Zilber et al., 2022)	Covid-19 among Indigenous communities: Case studies on Indigenous nursing responses in Australia, Canada, New Zealand, and the United States.	Case studies from New Zealand, Australia, Canada, and the USA, exploring government policies, public health actions, and Indigenous nursing leadership for Indigenous communities during a pandemic.	Indigenous nurses need support	Holistic approach to Indigenous nurses leadership should be supported

9.3 Israel surveys

Israel survey

health care workers	Bar-Zeev et al., 2022
health care workers	HaGani et al., 2022
health care workers	Khoury et al., 2022
health care workers	Melnikov et al., 2022
health care workers	Mosheva et al., 2021
health care workers	Nissan et al., 2021
health care workers	Zaitoon et al., 2022
hospital workers	Bashkin et al., 2021
hospital workers	Dopelt et al., 2022
hospital workers	Dopelt et al., 2021
nursing student	Drach-Zahavy et al., 2022
nursing students	Savitsky et al., 2021
nursing students	Savitsky et al., 2020
nursing students	Warshawski, 2022
nursing students	Zilber et al., 2022
nurses	Benbenishty et al., 2022
nurses	Dahan et al., 2022
nurses	Dubovi et al., 2022
nurses	Goldfarb et al., 2021
nurses	Green et al., 2022

nurses	Halperin et al., 2022
nurses	Hamama et al., 2022
nurses	Marey-Sarwan et al., 2022
nurses	Melnikov et al., 2022
nurses	Savitsky et al., 2021
nurses	Sperling, 2021a
nurses	Sperling, 2021b
geriatric facilities workers	Cohen-Mansfield, 2022
geriatric facilities workers	Cohen-Mansfield & Meschiany, 2022
geriatric facilities workers	Lev & Dolberg, 2022
nurses in community and hospitals	Zelevich et al., 2021
nurses in ICU	Green et al., 2022

9.4 New Zealand surveys

New Zealand survey

nurses	Cook et al., 2021b
nurses	Desroches et al., 2022
nurses	Haar & Mowat, 2022
nurses	Holroyd et al., 2022
nurses	Slykerman et al., 2022
nurses	Thompson et al., 2022a
nurses	Slykerman & Li, 2022
nurses	Song & McDonald, 2021
nurses in ED	Leaf & Murray, 2022
nurses in ICU	Yarad et al., 2022
nursing student	Jagroop-Dearing et al., 2022
nursing students	Green et al., 2020
geriatric facilities workers	Hughes et al., 2021

9.5 Themes evolvment during 3 years of Covid-19 in Israel

	2020	2021	2022
burnout, secondary trauma and compassion fatigue	Dopelt et al.	Findling et al.	Bar-Zeev et al.
	Milgrom et al.	Mosheva et al.	Benbenishty et al.
	Savitsky et al.	Nissan et al.	Cleper et al.
		Savitsky et al.	Cohen-Mansfield
		Zelevich et al.	Drach-Zahavy et al.
			Dubovi et al.
			Green et al.
			Halperin et al.
			Hamama et al.
			Kagan et al.
			Karni-Efrati et al.
			Khoury et al.
		Lev & Dolberg	

	2020	2021	2022
			Melnikov et al.
			Zilber et al.
 coping/resilience		Savitsky et al.	Dahan et al.
		Sperling	Drach-Zahavy et al.
			Green et al.
			HaGani et al.
			Marey-Sarwan et al.
			Warshawski
			Zaitoon et al.
 policy	Clarfield et al.	Goldfarb et al.	Melnikov et al.
	Tsadok-Rosenbluth et al.		
			.
 knowledge	Glatman-Freedman et al.		Dopelt et al
	Savitsky et al.		Dubovi et al.
			Marey-Sarwan et al.
			Melnikov et al.

	2020	2021	2022
			Savitsky et al.
			Sperling
ethics		Gebreheat & Teame	Sperling
		Sperling	Melnikov
Covid-19 ward		Dopelt et al.	Gendler et al.
		Savitsky et al.	Green et al,
		Sperling	Kagan et al.
vaccination		Davidovitch et al.	Zaitoon et al
		Rosen, Waitzberg and Israeli	

9.6 Themes evolvement during 3 years of Covid-19 in New Zealand

	2020	2021	2022
Burnout, secondary trauma and compassion fatigue	Hirdes et al.	Hammon et al.	Haar and Mowat
			Holroyd et al.,
			Jagroop-Dearing et al.
			Slykerman et al.
			Yarad et al.
coping/ resilience		Cook et al	Jagroop-Dearing et al.
			Leaf and Murray
			Slykerman et al.
			Slykerman and Li
policy		Thompson et al.	Desroches et al.
		Hughes et al.	Leaf and Murray

knowledge		Davis et al.	
		Clark et al.	
ethics		Cook et al.	
		Crowther et al.	
leadership	Hughes et al.	Clark et al.	Thompson, et al.
		Cook et al.	
		Davis et al.	
minorities	Song and McDonald	Davis et al.	
		Clark et al.	

Appendix 2: E-news articles

10.1 Israel 2020

nursing homes	<i>No man's land: Israel's nursing homes have turned into death traps</i>
	<i>Hospital director tapped by ministry to address Covid-19 nursing home fiasco</i>
system capacities	<i>Coronavirus: Will Israel's healthcare system survive?</i>
	<i>Israel's contact tracing system said to be vastly overwhelmed by virus spread</i>
staff's isolation	<i>Virus outbreak found at Tel Aviv hospital – report</i>
	<i>Number of sick medical staff rises to 42, with over 3,000 quarantined</i>
	<i>2 departments close at Wolfson hospital as staff diagnosed: medics ration masks</i>
staff's shortage	<i>Jerusalem nursing students help curb spread of Covid-19 at senior residences</i>
	<i>Understaffed and underpaid: Israeli nurses prepare to strike</i>
	<i>Nurses end strike after deal with Finance Ministry to solve manpower shortages</i>
	<i>Health Ministry fast-tracks licensing for 900 nurses amid pandemic</i>
	<i>Jerusalem College of Technology awarded \$9M grant to support nursing program</i>
IDF	<i>IDF naval commandos give Israeli coronavirus patients a hand</i>
	<i>Gantz orders IDF to build field hospital for virus cases as hospitals fill up</i>
nurses' stories	<i>Faces from the frontlines: Photographer at hospital captures Covid-19 'angels'</i>
	<i>Israelis looking out for overworked health care professionals</i>
	<i>Israel dedicates Independence Day flyover to nation's hospitals</i>
	<i>Nurses are the heart of our health-care system: Shoshy Goldberg, chief nurse</i>

Covid-19 ward	<i>Coronavirus: Israeli hospital allows families to say goodbye</i>
	<i>Israel opens world's first psychiatric unit for corona patients</i>
	<i>Inside an Israeli Coronavirus Hospital</i>
	<i>The struggles of healthcare workers during – and before – the pandemic</i>
	<i>An Israeli hospital set up a Covid-19 emergency care ward in 72 hours</i>
	<i>Inside the ultra-Orthodox hospital at the center of Israel's coronavirus pandemic</i>
	<i>8 healthy births, four wrenching separations, at first Covid-19 maternity ward</i>
	<i>Veteran nurse dies of Covid-19, the first victim among Israel's medical workers</i>
	<i>A nurse's account of life inside an Israeli Covid-19 ward</i>
Israel/Palestine	<i>The Arab medics battling coronavirus in Israel's divided society</i>
	<i>Meet the Majadlas: An Arab family of doctors on Israel's coronavirus front</i>
	<i>Arab nurse recites 'Shema' prayer to Jewish patient dying of COVID</i>
	<i>East Jerusalem Catholic hospital gets coronavirus unit for Palestinians</i>
	<i>Israeli Arab doctors and nurses help Orthodox Jewish patients with religious practice in midst of Coronavirus crisis</i>
ultra-orthodox Jews	<i>Secret ultra-Orthodox program treating thousands of Covid patients at home</i>
start ups	<i>Israeli healthcare technologies reduce pressure on global healthcare systems</i>
	<i>Two more Israelis inoculated against coronavirus [Israeli developed vaccine]</i>
	<i>How Covid-19 accelerated change: innovations in working with parents in Israel</i>
	<i>Israel's Sheba Hospital turns to telehealth to treat incoming coronavirus-exposed</i>
	<i>'Hospital room of future' aims to give Israel edge against 2nd virus wave</i>

	<i>Israel's vaccine dash is swamping nurses, and some officials couldn't be happier</i>
vaccination	<i>Israel starts Covid vaccine drive as Facebook groups taken down</i>
	<i>Health Ministry: Israel first country in the world to repackage vaccines</i>
	<i>How Israel got vaccines to 9% of its population in less than 2 weeks – far more than any other country</i>

10.2 Israel 2021

vaccination	<i>Israel owes its Covid-19 vaccination success to a system of universal coverage</i>
	<i>Israel clever coronavirus vaccination strategy</i>
	<i>Why Israel is leading the world in vaccinating its population</i>
	<i>Israeli study: 75% protection from 1st Pfizer vaccine dose, so okay to delay 2nd</i>
	<i>Report: Dozens of medical staff who refused vaccine catch Covid-19</i>
	<i>Parent threatens nurse at Beersheba school for administering Covid vaccines</i>
	<i>Nurses are helping Israelis bend the rules to get Covid-19 vaccines</i>
	<i>Covid-19: 0.54% of hospital staff caught virus 1-10 days after vaccination</i>
mandates	<i>Why Israel could force Covid vaccination, but won't</i>
	<i>Hadassah hospital said to furlough 80 workers who haven't taken Covid shots</i>
	<i>Israel's dilemma: Can the unvaccinated return to workplaces?</i>
IDF	<i>IDF restricts callup of reservists to Covid-vaccinated or recovered only</i>

	<i>IDF teams to provide care for Covid-19 patients treated at home</i>
Covid-19 ward	<i>Amid Covid-19, frontline medical workers take their trauma home</i>
	<i>Arab nurse recites 'Shema' prayer to Jewish patient dying of Covid</i>
staff shortage	<i>Aliyah resolutions to alleviate tech, engineering, medical labor shortage</i>
	<i>Israel seeks to ease immigration for doctors, nurses due to manpower shortage</i>
	<i>Staff at Jerusalem hospital says it's collapsing under wave of Covid infections</i>
	<i>Government okays NIS 55 million in bonuses for frontline medical staff</i>
stories	<i>When corona came to our delivery room, Israel</i>
Israel/Palestine	<i>Jewish and Arab health professionals unite in solidarity</i>
	<i>Coerced into silence: The reality of being a Palestinian doctor in an Israeli hospital</i>
ultra-Orthodox Jews	<i>Small Haredi network is offering Covid-19 treatment to all</i>

10.3 Israel 2022

omicron	<i>As Israel learns to live with Covid, hospitals struggle to cope</i>
	<i>Covid-19 isolation and compulsory masks should be cancelled - Ichilov CEO</i>
	<i>Israel sets Covid-19 record as rule changes create whiplash</i>
	<i>Government response to omicron variant triggers uproar in Israel</i>
	<i>Israeli doctor accuses health authorities of exaggerating fear of omicron variant</i>
	<i>1st kids' Omicron ward opens with classes, clowns, and doctors bracing for 'war'</i>
vaccination	<i>Israel mulls offering 4th Covid vaccine dose to all adults</i>
	<i>Israel hoped to vaccinate 750,000 toddlers against Covid. Few have heeded the call</i>
	<i>Israeli elementary school student receives same vaccine twice in two weeks</i>
staff shortage	<i>Coronavirus: Israel nurses' union threatens strike amid staff shortages</i>
	<i>Geriatric hospitals can now accept foreign workers as caregivers</i>
	<i>Covid-19 highlights Israel's need to invest in healthcare – editorial</i>
	<i>Israel seeks to ease immigration for doctors, nurses due to manpower shortage</i>

10.4 New Zealand 2020

transmission	<i>Q'town nurse tests positive; community transmission investigated</i>
	<i>Nurse case shuts down Queenstown hospital</i>
	<i>Queenstown Lakes hospital reopening</i>
	<i>Worker at New Zealand quarantine hotel tests positive for Covid-19</i>
	<i>PPE breach blamed for Christchurch healthcare workers catching Covid-19</i>
	<i>Coronavirus: Second Queenstown nurse tests positive, hospital for emergency and maternity only</i>
	<i>Coronavirus: Hamilton nurses test positive for Covid-19</i>
	<i>Waitakere: 57 staff stood down amid safety claims</i>
	<i>Coronavirus: Father who caught Covid-19 from Waitakere nurse daughter says he did 'everything humanly possible' to avoid it</i>
PPE	<i>Please help us: Home care workers still without protective gear</i>
	<i>Waitakere hospital sorry over Covid nurses</i>
	<i>Covid-19: Prepare to reuse goggles, frontline health workers told</i>
	<i>Covid 19 coronavirus: New Zealand's intensive care unit capacity revealed</i>
telemedicine	<i>Coronavirus: Only one call away - at the other end of New Zealand's Covid-19 hotline</i>
staff shortage	<i>Covid 19 coronavirus: Med students working in the crisis could be off the cards</i>
	<i>Coronavirus: ICU expert says NZ could double bed numbers in 'exceptional circumstances'</i>
	<i>Covid-19: What it's like for health staff in the ICU</i>
	<i>Aged-care nurses fed up with wage disparity launch campaign for fair pay</i>
	<i>Three more resignations at New Zealand Nurses Organisation</i>
nurses' stories	<i>Covid-19 coronavirus: Meet the Kiwi nurse keeping buff in lockdown</i>
	<i>Covid-19 coronavirus: Auckland nurse abused during supermarket trip</i>
	<i>The psychological trauma of nurses started long before coronavirus</i>

	<i>A New Zealand healthcare worker describes the unique stress of waiting for waves of coronavirus cases to hit when so far they haven't</i>
	<i>Coronavirus: He Puna Waiora Wellness Centre reconfigures</i>
	<i>Report reveals frontline nurses' struggles during Covid-19 pandemic</i>
	<i>Hospital sent nurses all over after Covid work</i>
	<i>Covid-19: Triage tent in medical centre carpark, signs at the door</i>
	<i>Coronavirus: Inside the Auckland City Mission during the Covid-19 crisis</i>
	<i>Coronavirus: Air ambulances rule NZ's empty skies while Covid-19 grounds private jets</i>
appreciation	<i>Hospital to allow staff to park for free after nurse forced to pay \$19</i>
	<i>Christchurch hospital park and ride shuttle service to be put on hold</i>

10.5 New Zealand 2021

staff shortage	<i>Nurses vote to strike three more times as pay dispute with DHBs continues</i>
	<i>Thousands of nurses go on strike in New Zealand</i>
	<i>Covid 19 delta outbreak: Unwelcome nurses leaving NZ over immigration rules</i>
	<i>Nurses warn New Zealand is dangerously under-prepared for tsunami of cases</i>
system	<i>Warning bells from health experts, National Party over health system's ability to cope with more Covid-19 cases</i>
	<i>Sticky tape, plastic wrap and string: Senior nurses warn Hawke's Bay hospital ED is on the verge of disaster</i>
	<i>Covid-19: Antivirals may come too late for outbreak's peak - experts</i>
nurses' stories	<i>Covid-19's missing heroes: Nurses' contribution and visibility in Aotearoa New Zealand</i>
mandates	<i>Have your say: Should the government deny free medical treatment to unvaccinated Covid patients</i>

	<i>Covid-19 delta outbreak: Dunedin nurse referred to nursing council over online threats to attack vaccination buses</i>
vaccination	<i>Covid-19 Delta outbreak: NZ needs 95% vax rate before even thinking of Xmas freedom - top expert</i>
tracking	<i>Covid-19: Auckland City Hospital contacts staff after nurse tests positive</i>

10.6 New Zealand 2022

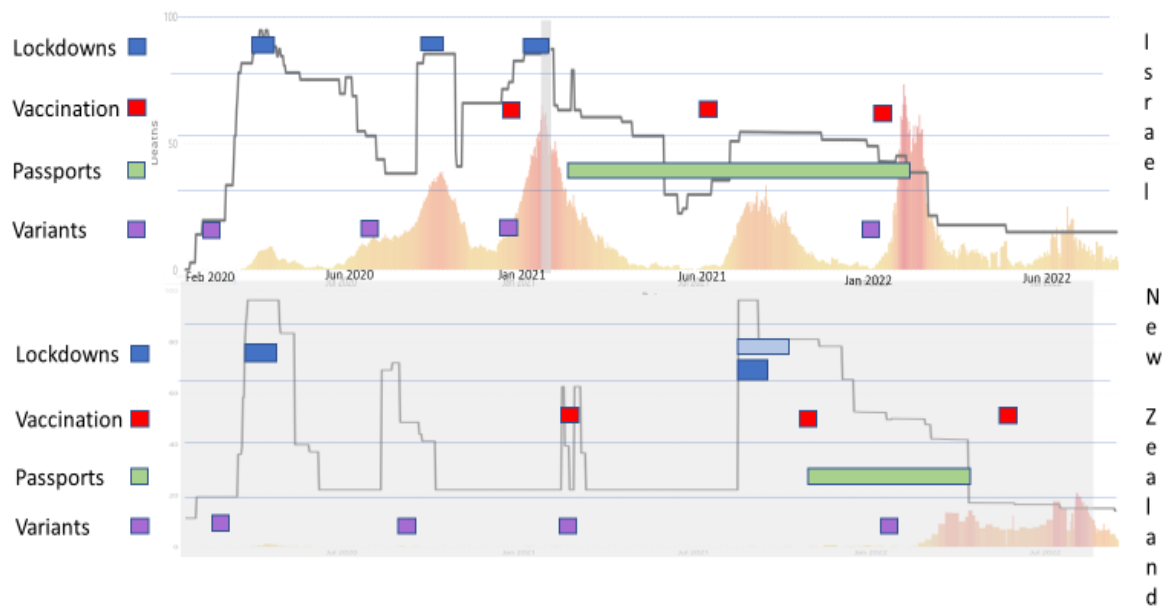
staff shortage	<i>Health recruitment service aims to combat workforce shortages</i>
	<i>Covid-19: Auckland hospitals put most care on hold, incentives fail to fix staffing issues</i>
	<i>NZ 'can't rely' on overseas nurses to fill staffing shortages</i>
	<i>Nursing shortage: Nurses 'broken' while sector faces thousands of vacancies</i>
	<i>Whangarei hospital 'dangerously' understaffed as shift incentive scheme ends</i>
	<i>Covid-19 having impact on already-high rates of nursing students dropping out</i>
	<i>Kiwi nurse shortage: Australia has more nurses than New Zealand, health figures show</i>
	<i>Nurses: National critical of low success rate of \$300,000 recruitment drive</i>
	<i>Healthcare crisis: North Shore hospital near capacity, woman 'left in own urine for 14 hours'</i>
	<i>Hospital nurses sent to MIQ to help combat Covid-19, unable to get old jobs back</i>
	<i>Covid border opening: Health workers, nurses, doctors say immigration changes not enough</i>
	<i>Major health and safety risk: Nursing students cover shifts at Dunedin hospital</i>
	<i>Hospitals consistently understaffed; nurses overworked</i>
	<i>Covid 19: Residency eligibility is leaving nurses in limbo, despite critical shortage</i>
	<i>Nursing students earn while they learn in Covid response</i>

	<i>New Zealand nurses take action over staffing crisis and pay cut</i>
	<i>New Zealand competing with other countries to recruit ICU nurses</i>
omicron	<i>Covid-19: Hospitalisations rise to all-time high on record day of Omicron spread</i>
	<i>New Zealand goes from zero Covid-19 to world leading infections and deaths: Workers must fight for an elimination strategy</i>
	<i>New Zealand logs 9975 new COVID-19 community cases over past week</i>
	<i>Clinics kept busy by high South Island Covid-19 rate</i>
	<i>Covid-19: How did Pfizer vaccine fare against Omicron in New Zealand?</i>
	<i>Covid-19: 14311 new cases in past 7 days; five questions about NZ's third Omicron wave</i>
	<i>New Zealand drops mask and vaccine mandates in sweeping Covid changes</i>
	<i>North Shore hospital: Nurses criticise lack of privacy for patients awaiting treatment</i>
	<i>New Zealand government maintains "let it rip" policy despite worsening crisis in hospitals</i>
	<i>Covid-19 continues to impact New Zealand's diplomacy</i>
mandates	<i>"Take on for the team" Unvaxxed nurses urged to get jab to return to work</i>
	<i>Covid 19 mandates: National's Chris Bishop says vaccine mandates for health workers should now go</i>
	<i>Protests to highlight plight of unvaccinated nurses</i>
	<i>Nurses who can't get boosted after contracting Covid stood down</i>
nurses' stories	<i>MIQ and 10 million hours of care: The health leader you've never heard of</i>
	<i>What it was like: A pregnant nurse, parent and immunocompromised student on getting Covid-19</i>
	<i>Nurse Jenny says it's 'therapeutic' to be back in NZ</i>

system	<i>Healthcare unions critical as ministry says workers with Covid-19 can return to work earlier</i>
	<i>Time to empower nurses to take on positions of power and influence</i>
	<i>Behind the masks: how Covid-19 has changed nursing forever</i>
	<i>Nurse prescribers to prescribe Paxlovid for Covid-19</i>
	<i>Covid-19: Nurses' dismissal for anti-vax social media posts 'justified'</i>
	<i>Nurse fired for calling vaccines 'murderous' on Facebook loses ERA case</i>
	<i>How should New Zealand manage Covid from now - limit all infections or focus on preventing severe disease?</i>
	<i>Covid-19 Delta outbreak one year on: A year of lockdowns, infamy, vax-a-thons and a whole lot of cases</i>
	<i>Nurse who worked hospital shifts instead of being in Covid isolation fined \$5500</i>

Appendix 3: Timeline

Comparison of stringency and Covid-19 death



Appendix 4: Excess death table

Retrieved from: Ioannidis, J. P. A., Zonta, F., & Levitt, M. (2023a). Variability in excess deaths across countries with different vulnerability during 2020-2023.

medRxiv, 2023.2004.2024.23289066. <https://doi.org/10.1101/2023.04.24.23289066>

Country	0-64 years, absolute	0-64 years, p%	65 years and over, absolute	65 years and over, p%	0-14 years, absolute	0-14 years, p%
Denmark	-1,667	-6.4%	-3,153	-2.0%	-39	-4.4%
Sweden	-1,828	-6.0%	-5,581	-2.1%	-72	-5.7%
France	-10,139	-3.4%	82,756	5.0%	-561	-5.0%
Luxembourg	-74	-3.0%	-39	-0.3%	41	44% (NR)
Norway	-492	-2.8%	-1,738	-1.5%	-69	-11.5%
New Zealand	-580	-2.7%	-3,352	-3.6%	-32	-2.9%
Finland	-637	-2.6%	3,484	2.3%	-34	-6.6%
Israel	-598	-2.3%	2,867	2.2%	-403	-15.5%
Australia	-1,682	-1.9%	-9,031	-2.1%	-481	-11.8%
Belgium	-690	-1.3%	12,788	4.2%	-393	-20.6%
Switzerland	-160	-0.6%	3,577	1.8%	-28	-2.2%
South Korea	542	0.3%	-17,916	-2.6%	-776	-20.8%
Netherlands	1,559	2.3%	13,816	3.0%	-25	-1.0%
Germany	15,951	3.7%	85,706	3.2%	-637	-5.5%
Iceland	47	3.9%	27	0.4%	20	60% (NR)
Austria	2,409	6.4%	15,115	6.6%	-99	-8.8%
Canada	14,682	9.2%	5,501	0.8%	879	13.4%**
Slovenia	-215	-2.0%	3,824	6.6%	-10	-4.7%
Hungary	2,049	2.3%	23,107	7.0%	-113	-7.4%
Croatia	910	3.4%	12,179	8.6%	-38	-5.7%
Portugal	2,368	4.7%	12,984	4.1%	-108	-9.1%
Poland	14,944	5.0%	131,950	12.6%	-845	-12.5%
Spain	11,245	6.2%	58,467	4.9%	-203	-4.4%
Czechia	3,704	6.3%	33,025	11.0%	-223	-15.5%
Italy	13,282	6.4%	120,939	6.7%	-958	-17.0%
Estonia	682	7.3%	2,740	6.6%	-7	-3.9%
Slovakia	3,039	7.5%	14,607	10.7%	-51	-4.0%
Latvia	1,583	7.9%	6,191	8.8%	-84	-23.9%
Greece	4,549	9.2%	25,384	7.3%	-141	-10.3%
Lithuania	3,121	11.5%	10,855	11.4%	-96	-20.9%
UK	35,759	11.8%	75,876	4.4%	-805	-6.5%
Bulgaria	11,285	16.5%	50,015	18.4%	-276	-15.8%
Chile	16,324	17.5%	30,746	11.0%	-1,219	-19.4%
USA	440,485	19.0%	830,094	12.3%	-3,803	-4.0%

*Countries are listed in increasing p% among the 0-64 years old age stratum

**For Canada, the 0-14 year old age band given in stmf is extrapolated from the 0-44 year age band in the original data <https://www150.statcan.gc.ca/n1/tbl/csv/13100768-eng.zip>. See

