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**An Exploration of Nurses' Experiences of Delivering
the Before School Check**

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ABSTRACT

The New Zealand Well Child/Tamariki Ora (WCTO) programme is a community based well child health service; the programme is supported through the WCTO Framework and an associated National Schedule. The schedule outlines a total of 12 core contacts that every child and their family are entitled to receive from birth to five years. The first four of these are provided by the child's lead maternity caregiver, with the remainder contracted out to Well Child Providers.

The Before School Check (B4SC) is the eighth and final core contact under the WCTO schedule and is performed between 4 and 5 years of age. The B4SC was initiated in September 2008 and utilises not only a developmental screening questionnaire but also a health assessment, behavioural screen, hearing and vision assessment and oral health screen. This check is not necessarily always delivered by the child's well child provider but can also be done through their family doctor or practice nurse.

The purpose of this study was to explore nurse's experiences of implementing and delivering the B4SC. Since its implementation in 2008 the B4SC has been delivered in a variety of ways by a range of nurses across the country. This study focused on the experiences of nurses working in Auckland and the participants included practice nurses, plunket nurses and public health nurses. Using semi-structured interviewing the participants in this study were given the opportunity to share their experiences and to discuss any issues raised. Based on their experiences participants were also asked if they had any recommendations for the further development of the B4SC.

Thematic analysis using a general inductive approach was used to analyse the data and a number of themes emerged. Although the participants were very positive about the

potential benefits of the check they expressed a range of challenges in the delivery of it. Five key themes were identified entitled: Construct constraints, Time, Translation & Culture, Child Interaction and Training & Support. Recommendations are made based on the study findings and suggestions for further research are presented.

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“It’s not the mountain we conquer but ourselves.” Edmund Hillary

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Chapter 1

INTRODUCTION

The early childhood years are a time of significant growth and development which are influenced by many factors including physical and psychological health, family environment, and socioeconomic status (Anderson et al., 2003; Poulton et al., 2002). The effects of these factors on the life course of a child can be profound and there is an increasing awareness of the relationship between these childhood influences and acquiring a solid foundation for future health and wellbeing as well as academic attainment (Biddulph, Biddulph & Biddulph, 2003; Fiscella & Kitzman, 2009; Zuckerman & Halfon, 2003). Research tells us that having access to health and educational support in the early years can make a positive impact on a child's future and the cost to society as a whole (Doherty, 1997; Emel & Alkon, 2006; Kagan & Rigby, 2003; Pivik, 2009). On the basis of these findings it is important therefore, that young children are catered for by health and education systems which actively promote health, wellbeing and early education. When allocating funding and planning services one must remain mindful of the long term societal cost of *not* supporting our young children in this way (Farrar, Goldfield & Moore, 2007).

The Before School Check (B4SC), a New Zealand Ministry of Health led initiative, is a comprehensive, free health check for 4-year-old children. It aims to “identify behavioural, developmental or other health concerns that may adversely affect the child's ability to learn in the school environment” (Ministry of Health [MOH], 2008, p.3). The B4SC is the eighth and final well child check under the New Zealand Well Child/Tamariki Ora (WCTO) National Schedule (MOH, 2002, Appendix 1).

In this chapter the aim of this study will be presented as well as the background to the development of the B4SC and how it is situated in the context of the WCTO Schedule (MOH, 2002). My own background and interest in this study will also be discussed.

Research Question

What are nurses' experiences of delivering the Before School Check?

Aim

The aim of this study was to explore the experiences of nurses who currently perform the B4SC in the Auckland region. The study focused on the actual experience of implementing the check from a practical viewpoint and the nurses' reflections of this. Since its inception in 2008 the B4SC has been contracted out to different providers within each region and, as a consequence, is delivered by nurses with varying degrees of paediatric experience. It is hoped that providing an opportunity for this group of nurses to share their experiences will positively contribute to the further development of the B4SC nationally.

Background

The B4SC was launched in February 2008 by the Ministry of Health (MOH) under a Labour government. The purpose of B4SC is to identify and address any health, behavioural, social or developmental concerns which could affect a child's ability to enter school ready to learn (MOH, 2008). This New Zealand wide programme had been a key feature of the Labour Party's 2005 manifesto and additional funding was allocated in the 2006 Budget to increase the number of Well Child contacts from an average of 6.5 to 8 contacts per child including the B4SC, a comprehensive health check for all 4-year-olds.

The B4SC check would replace the school New Entrant (NE) check as the final core Well Child check offered under the WCTO Framework (MOH, 2010).

This decision arose out of the Review of the Well Child/Tamariki Ora Framework in July 2006 (Allen & Clarke, 2006). The review was framed by The New Zealand Health Strategy (MOH, 2000), The Primary Health Care Strategy (MOH, 2001), He Korowai Oranga (MOH, 2002) and the New Zealand Child Health Strategy (MOH, 1998). In July 2007 the Ministry released the 'Preferred Options for Changes to the Content of the Well Child/Tamariki Ora Framework' and its accompanying background paper, 'Supporting Evidence for Changes to the Content of the Well Child/ Tamariki Ora Framework' (MOH, 2007) to key stakeholders and sought their feedback. An interdepartmental steering group was formed which included officials from the Ministries of Health, Education and Social Development along with a broad multi-sector reference group who provided an oversight for further developing the suggested changes. The review supported the retention of the existing Well Child framework but with more emphasis placed on health promotion and early intervention. The resulting changes made to the content of the core assessments and the ages at which they were to be carried out are outlined in "Changes to the Well Child/Tamariki Ora Framework" (MOH, 2010).

During 2006 the MOH conducted a survey of providers of the New Entrant (NE) check to find out how well it was being performed. The results indicated that the NE check was no longer universally provided and the total number receiving the full assessment was small plus the content and quality of the check variable. As a result a decision was made to relook at this final core contact and develop it into something more sustainable and meaningful to all concerned (MOH, 2006). The Ministry proposed that a transition to school assessment take place between the ages of 4 to 5½ years, to be called "Spreading your Wings" in acknowledgement of the children's progression towards independence and movement into

the wider world (Jayakar & Tuohy, 2007). However, feedback from the early childhood sector suggested that there may be a negative connotation with emphasising entry to school as a milestone. Often described as the “Ready for School Check” the Ministry elected that the check be named “The Before School Check”. This assessment would replace the existing school NE check and would not take place at 5 years but preferably between 4 and 4½ years, allowing more time to capture those children who were ‘hard to reach’ or who were unable to attend. Assessing at a younger age also meant that if any interventions needed to be put in place, they could be done so prior to school entry. The Ministry proposed that the health professionals who delivered the B4SC have a nursing or medical registration, community experience, child health experience and an ability to communicate with children and their families. The intention was that the B4SC be not just another health check but an assessment which considered the child in the context of their community and environment and ensured that children started school able to participate and learn to the best of their ability.

The MOH consulted with the Ministry of Education (MOE) to gain input into the Well Child Review and the formulation of options for the Before School Check assessment. Two focus groups were held with representatives from MOE, Ministry of Social Development, Public Health Nurses, Practice Nurses, Vision and Hearing Testers, Māori and Pacific providers, Paediatricians and Social Workers in schools to gain input and feedback to proposed content and format of the Before School Check assessment. The MOE commissioned a review (Carter & Fieldsend, 2005) of barriers and influences that have been linked to poor learning outcomes which included a record of current screening tools and processes used nationally and internationally to identify these. The report surmised that there was a wide variety of potential screening tools and processes used to identify children at risk of poor learning outcomes but there was no consensus on what

constituted best practice in screening. The most promising tools seemed to be those that consider the most variables in particular; Ages and Stages, Parental Evaluation of Developmental Status (PEDS), Early Screening Inventory (ESI-R) and the Brigance screen. These screening tools recognise the importance of taking a holistic view of child development and the report also commented that the Strength and Difficulties Questionnaire (SDQ), although a specifically behavioural screen, provided good measures of a child's strengths as well as areas of difficulty.

On the basis of this review and with input from health and educational professionals, the MOH proposed that the content of the B4SC check should include: vision and hearing screening; behavioural screening using the SDQ completed by both a parent and the early childhood teacher; developmental screening using the PEDS tool; height, weight and body mass measurements; an oral health assessment and a standardised child health questionnaire (CHQ). The practical applications of each of these are outlined in the Handbook for Practitioners (MOH, 2008). A brief description of the components of the B4SC check follows:

SDQ (Appendix 4)

The SDQ¹ is a brief behavioural screening questionnaire which focuses on five different domains of behaviour: emotional, conduct, hyperactivity, peer relationships and prosocial (Goodman, Ford & Simmons, 2000). The responses to questions relating to the attributes for each domain are scored and the total score received from each domain plotted on a scoring sheet which gives ranges for normal, borderline and abnormal results. The assessor is able to determine any concerns or issues which may require further support based on the

¹ See www.sdqinfo.org/ for more information

overall score. For the purposes of the B4SC the questionnaire is completed by the parent or caregiver and, in addition, the child's early childhood teacher is asked to do the same.

PEDS (Appendix 3)

The PEDS² is a short ten item questionnaire which aims to elicit parental concerns about their child's development or behaviour (Glascoe, 2000). Parents are asked to respond to ten simple questions by circling "yes", "no" or "a little" on the questionnaire and these concerns are then categorised into significant or non significant concerns, predictive or not predictive of developmental delay. The PEDS assessment is not designed to be used as a stand-alone tool and, depending on the number of predictive responses, a second stage screen may need to be performed. The Ages and Stages Questionnaire³ has been recommended for use as a secondary developmental screen in the B4SC.

CHQ (Appendix 2)

The CHQ, in its original format, is a two page questionnaire formulated by the Ministry of Health specifically for the B4SC. The CHQ asks about the child's demographic profile, general health, immunisation status, dental health, eye and ear health plus any support services that the child and/or the family may be receiving (MOH, 2008, p.8). Whilst completing the CHQ the height and weight of the child are measured and body mass index calculated.

Hearing and Vision

Hearing and vision screening in the context of the B4SC check is typically only undertaken by a qualified Vision Hearing Technician. Audiometry screening, tympanometry and a

² See www.PEDStest.com for more information

³ See <http://agesandstages.com/>

visual acuity screen are usually performed at a separate appointment to the B4SC health assessment and the results fed back to the B4SC provider for inclusion in the child's assessment outcomes.

Oral Health Assessment

A 'lift the lip' oral health assessment (New Zealand Dental Association, 2008) aims to briefly examine a child's teeth to identify obvious early or advanced decay. The check is simple to perform and involves lifting the upper and lower lips to expose the whole tooth and gum line and check for any abnormalities. When decay is observed by the practitioner the child is automatically referred to a dental therapist or dentist.

The B4SC programme was piloted by both Whanganui and Counties Manukau District Health Boards in 2007; the programme was evaluated and fine-tuned before it was rolled out nationally in 2008. The evaluation revealed a number of format and construct issues such as time taken to complete the check and the amount of paperwork involved. It was also noted that the demand for referrals frequently outweighed the services available for children and their families. Accessibility for high needs families or those who traditionally had not engaged with services was highlighted as another concern as too often these were the children who were most in need of this type of assessment. (CBG Health Research Limited, 2007; Tuahine, 2010; Wills, Morris Matthews, Hedley, Freer & Morris, 2010).

To date research conducted in relation to the B4SC has centred on the Hawke's Bay experience. The Hawke's Bay Primary Health Organisation (HBPHO) won the contract to deliver the B4SC in the region in 2009 and they have remained very active in monitoring and researching outcomes in relation to it through the Eastern Institute of Technology (EIT) in Napier. A number of studies have been conducted all of which have contributed

to the ongoing development of both the check and the nurses who deliver it. (Hedley et al., 2012; Kilpatrick, 2010; Morris Matthews, Wills, Mara, Stockdale-Frost & Kirkpatrick, 2010; Tuahine, 2010; Wills et al., 2010). This current piece of research is the first to provide an insight into experiences of administering the B4SC from outside of the Hawke's Bay region, in the most densely populated and culturally diverse city in New Zealand - Auckland.

The participants in this study had all delivered the B4SC in the Auckland city region. In the results of the 2006 Census it was estimated that over 10% of New Zealand's entire population lived in the region, with over 18% of these being children under the age of 15 years and over a third of those living in the most deprived areas of the city (Statistics New Zealand, 2007; Statistics New Zealand and Ministry of Pacific Island Affairs, 2010). As previously mentioned Auckland is a multicultural community with almost 30% of the population speaking two or more languages. At the time of the 2006 Census 61% of the population described themselves as European, followed by Asian 20%, Pacific peoples 12% and Māori 7%. Samoan's form the largest contingent of the Pacific peoples group followed by Cook Islands Māori and Tongan people (Statistics New Zealand & Ministry of Pacific Island Affairs, 2010). This demography has made the delivery of the B4SC in Auckland challenging for all concerned.

The Researcher

I am a registered nurse undertaking this research as partial fulfilment of a Master of Philosophy (Nursing) at Massey University in Auckland. My experience as a Paediatric Nurse, Public Health Nurse (PHN) and B4SC Clinical Specialty Nurse (CSN) has been responsible for my increasing interest in the theory underpinning the construct and delivery

of the B4SC. I was privileged to play a part in the initial roll out of the check in 2008 in the Auckland region.

Initially the B4SC was delivered by a small team of six experienced PHNs who ran community based B4SC clinics throughout the different Auckland suburbs. Usually administering between 5 and 7 scheduled checks a day these nurses soon became experts in their roles and passionate about the work that they did. In 2010 the B4SC was contracted out to Primary Care and the original team was disbanded. The basis for this decision was to be able to 'cast the net wider' and increase the accessibility and uptake of checks in accordance with targets set by the Ministry.

In my role as CSN, I was involved in the initial training of the PHNs to administer the B4SC and in the subsequent training and support of Practice Nurses under the 'host' Primary Healthcare Organisation. During my time as CSN I was also involved in delivering the B4SC myself through community centres in central Auckland. In 2011 Plunket was also contracted to deliver the B4SC in the inner Auckland area, in order to provide the outreach component of the B4SC for the Primary Care service delivery model. The following year Plunket made the decision not to re-sign the contract, citing challenges of accessing 'hard to reach' families and not being able to sufficiently offset that cost by doing more of those who *were* motivated to attend.

Although I became very experienced in all aspects of the check in my role as the CNS for the B4SC, it was the reporting of the challenges practitioners were experiencing in the field that led me to want to investigate these further. As an experienced PHN myself, I was interested to explore and capture the experiences of other PHN's in delivering the B4SC, as well as those of Plunket Nurses and Practice Nurses with whose roles I was less familiar.

Given the recent changes in provider delivery it was timely to capture this group of nurse's experiences in order to further inform the development of this valuable preschool check. Although my knowledge of the B4SC enabled me to relate to the nurses experiences, the findings are wholly based on the data collected from the individually taped interviews. I have approached this research as an 'outsider' as I am no longer working in the B4SC programme and as a result I have been better able to effectively distance myself and my own perceptions from those of my participants.

Outline of Thesis

This first chapter has provided an outline of the study, the aims, background and the researcher's positioning within it. The B4SC assessment questionnaires have been briefly introduced and an overview provided of the context within which the B4SC is situated.

Chapter 2: Literature Review

This chapter will review the literature in relation to school readiness from a health perspective and current interventions that support this. The ethical issues around screening are reviewed as well as nurses' perceptions of their roles in the provision of well child care.

Chapter 3: Research Methods

The research methods used in this study are introduced, the ethical implications discussed and the selection of participants outlined.

Chapters 4 & 5: Findings

These chapters present the findings from the individual interviews in relation to the themes identified. Chapter Four focuses on the experiences during the actual delivery of the B4SC assessment and Chapter Five looks at the reflections and experiences 'post' check.

Chapter 6: Discussion

Chapter Six offers a discussion of the findings in relation to the literature. Suggestions are made for further research and the limitations of the study are noted.

Chapter 7: Summary and Conclusions

This chapter presents my summary and conclusions and I make recommendations for the future development of the B4SC.

Conclusion

This research has created an opportunity for nurses to contribute to the further development of the B4SC, to improve the quality, make it more meaningful, more satisfying to deliver and ultimately more sustainable. It is hoped that by sharing the findings from this study with those ultimately responsible for its future, the B4SC will continue to effectively and efficiently identify those children in need of extra support prior to transitioning to primary school in New Zealand.

Chapter 2

LITERATURE REVIEW

Introduction

This chapter explores the literature related to school readiness from a health perspective and current interventions that aim to assist in the successful transition of the child into the school environment. The review begins with an overview of what is meant by school readiness from a health perspective and follows on to look at some of the current programmes that set out to support readiness in their objectives.

A search of the literature currently available internationally and in New Zealand, revealed a gap in available studies about the effectiveness of well child programmes that have a combined educational and health element and whose aim it is to assist with the transition to school. In contrast, there is a considerable body of literature on the effectiveness of purely educational based and cognitive school readiness assessments and programmes. When this is coupled with programmes that also consider the health needs of children transitioning to school the literature available diminishes again.

A search on the topic of ‘school readiness’ itself however, yielded a wealth of literature from across the educational, developmental, psychological and to lesser degree, health domains. Differing interpretations on what it means to be ‘ready for school’ are scattered through reports, research articles, books and educational reviews. In addition to this there are many anecdotes and opinion pieces discussing school readiness from a range of perspectives. Much of the information is based around North American studies and most

of the current school readiness research focuses on just one or two aspects of its components, there were fewer studies available that consider readiness in its broader sense.

There has been little research undertaken in New Zealand on the effectiveness of child health services particularly in the primary health care and community settings. In the Ministry of Health's review of the Well Child/Tamariki Ora (WCTO) Framework (MOH, 2007) it was highlighted that there was a lack of quality data to enable the assessment of well child service effectiveness and whether the services provided actually improved child health outcomes. The Before School Check (B4SC) is the eighth and final Well Child Check offered free under the WCTO Framework. The literature and studies referred to in this chapter originate predominately from North America, Australia, New Zealand and the United Kingdom.

There was a paucity of literature available on nurses' experiences of delivering well child care programmes in the community setting. Studies conducted in the nineties focused more on the skills and expertise of nurses entering into primary care as this was a time when more were beginning to work alongside General Practitioners. Research later than this has looked into other areas of community nursing and although not specific, they do provide a valuable insight.

2.1 Literature criteria

The aim of this review was to provide an overview of the literature relating to the current approaches to the assessment of school readiness. For the purpose of this study and to maintain relevance only the literature containing discussion around the concept of school readiness from a health and/or holistic perspective was examined.

The literature available on nurse's experiences delivering care in the community was also examined. Due to the relatively small amount of specific literature that was available on these topics no date parameter was set; relevance to the topic under discussion determined inclusion.

The initial literature search was carried out using the CINAHL, Medline, Ebsco and Pub Med databases as well as a Google NZ and Google scholar search of the internet. Key word combinations such as 'school readiness', 'child health surveillance', 'well child screening', and 'transition to school' were utilised to assist in the search. Where the search results were too broad or too narrow limiters and/or expanders were employed for example: Well Child **and** health **and** school **and** readiness. This greatly assisted in gaining more specific and relevant information.

2.2 Defining School Readiness

Definitions of school readiness vary depending upon who is defining it and why. One of the early theorists was Arnold Gesell (1880-1961), a psychologist and paediatrician who believed that children were ready for school when they had moved through certain developmental stages. Gesell cautioned parents and teachers to be patient as each child would develop in his or her own timeframe. Gesell's theory is rooted in biology and in the belief that "time-locked processes of biological growth" (Harris & Butterworth, 2002, p.21) are particularly important for the emergence of motor and perceptual abilities (Gesell, Ilg, Ames & Bullis, 1977). If a child was not deemed 'ready' for school then the advice was to delay entry.

At a similar time to Gesell, Russian psychologist Lev Vygotsky (1896-1934), suggested that children benefit from having certain psychological skills in place before beginning school

and that it was the culture surrounding the child that influenced the course of their development not a predetermined pattern of growth. Vygotsky strongly believed that a child's understanding of the world stemmed from the values and beliefs of the adults and children in their lives (Leong & Bedrova, 2003; Mooney, 2000). Vygotsky alleged that a child's interaction with their teachers and peers were vital in advancing their knowledge. Vygotsky's observations were considered very controversial at the time and for 20 years after his death his works were suppressed by the Russian Stalinist Government of that period until the early 1960s when they were revisited by another generation of psychologists and teachers. Interestingly, many of Vygotsky's ideas now form the basis upon which early childhood teaching curriculums are planned today.

More recently, Meisels (1999) defined four theoretical approaches to looking at children's readiness for school. Firstly, from a developmental point of view, readiness is described by Meisels as 'within the child' just as Gesell had proposed. Secondly, the influential perspective which argues that a set of skills needs to be acquired before a child starts school such as, knowing colours, shapes, writing own name and counting to ten. Thirdly, he claims that a child should be considered in the context of his or her environment in order to obtain a fair assessment of their readiness to learn. Finally, the "interactionalist" view which focuses on the "children's current skills, knowledge and abilities and on the conditions in which the children are reared and taught" (Meisels, 1996, p.409).

Another way in which the school readiness definition has recently evolved relates to the developmental domains now considered relevant to a child's school readiness. Bruner, Floyd and Copeman (2005) describe these as not restricted to cognitive development but as multi-dimensional, involving physical, social and emotional development. In addition they describe general approaches to learning which include physical health and wellbeing,

emotional maturity, social competence, language and cognitive ability as contributing factors.

2.2.1 School Readiness within an Ecological Framework

Over the last couple of decades the understanding of school readiness has moved from a child centred definition, to a more ecological approach and one that addresses the child in the context of their family and their community. Bronfenbrenner and Morris (1998) put forward the ‘ecological systems theory’ which is underpinned by the belief that how well a child develops and learns is multifaceted, influenced by individual, family, neighbourhood, community and societal factors. Bronfenbrenner and Morris believe that a collaborative, multidisciplinary approach to promoting school readiness is imperative.

Emel and Alkon (2006) also present an ecological model of school readiness based on their review of school readiness initiatives across the United States and the focus on the health aspect of these programmes. They recommended the inclusion of specific health components in all community school readiness programmes particularly around medical, oral, vision and mental health screening as well as access to health services for both the child and the family. Emel and Alkon also suggested that programmes may want to address maternal health, providing education for health professionals around the importance of health in relation to school readiness and promote better collaboration of services. The ecological model, together with the emphasis on early experiences has led to an approach that widens the foundations of readiness from individuals to communities; one way of expressing this broader concept of readiness is by using the “Ready Child Equation” (Walsh, 2005), developed by the National School Readiness Indicators Initiative in the US:

Ready Families + Ready Communities + Ready Services + Ready Schools = Children Ready for School (Kagan & Rigby, 2003, p.16; Rhode Island KIDS COUNT, 2005, p.12).

Whilst viewing school readiness within an ecological framework appears to be the preferred thinking of researchers, educators, policy makers and health professionals today, this shared responsibility brings with it diverse perspectives determined by these different roles (Dockett & Perry, 2007). These differences can mean that people may believe that they are working towards the same end but can actually be working unintentionally at odds.

2.2.2 Teachers

Teachers have traditionally tended to focus on individual child skills and attributes. A survey was conducted by the National Center for Education Statistics in Canada (National Center for Educational Statistics, 1993; United States Department of Education, 2003) of 1448 kindergarten teachers. The study revealed that the teachers identified school readiness as a child being physically healthy, rested, well nourished; able to communicate their needs, wants and thoughts and who were enthusiastic and curious in approaching new activities. Surprisingly, it appeared that teachers did not attach particular importance to specific numeracy and literacy skills. The teachers also highlighted the importance of socialisation, friendship, communication and general life skills as critical factors in learning and working alongside others.

2.2.3 Parents & Families

Parent's definition of school readiness has been shown to identify different issues. In the aforementioned National Center for Education Statistics survey, parents typically defined readiness in terms of academic abilities, such as the ability to count or know the alphabet. Interestingly over 10 years later McAllister, Wilson, Green and Baldwin (2005) explored the definition of school readiness with families participating in the Early Head Start Program (USA). These parents identified and prioritised the importance of social and emotional health in relation to their own and their child's readiness for their child to begin school.

Oliver, Dunn, Kohen and Hertzman (2007) claim that for young children, familial environments have the greatest influence on development and school readiness. Kohen, Hertzman and Brooks-Gunn (1998) evaluated data from Canada's National Longitudinal Survey of Children and Youth (Statistics Canada, 1995). They focused on school readiness in toddlers (2-3yrs) and preschoolers (4-5yrs). For preschoolers, receptive verbal abilities were assessed by interviewers and mother's reports of behaviour problems. These outcome measures were examined in relationship to various neighbourhood and familial characteristics. Results revealed that family characteristics were the primary influence in promoting school readiness. Especially relevant was maternal education and family income in predicting children's competencies.

Stacks and Oshio (2009) examined the relationships between social skills, attachment difficulties and school readiness in a sample of low income children who were part of the Hard Start programme in Midwest America. Their findings suggested that parent-child relationships are related to teacher-child relationships and those children who had a secure attachment with a parent were more likely to have a better relationship with their teacher. Feeling secure and being socially competent are said to be associated with school readiness and are traits in a child that are likely to lower the risk of behavioural problems in the school environment (Bost, Vaughn, Washington, Cielinski & Badbard, 1998).

2.3 Health and Learning

The connection between health and education is promoted by McAllister, Wilson, Green and Baldwin (2005) who frame school readiness as a public health issue. In particular they focus on parents' identification of social and emotional health as a condition of readiness. Many of the parents in McAllister's study sought community and program support for themselves and their children on entry to school. Fiscella and Kitzman (2009) also note a

“reciprocal relationship between health and education over time that contributes to disparities in each” (Fiscella & Kitzman, 2009, p.1074) and that there needs to be a much closer alignment of education and health policy than currently exists. They argue that optimising a child’s educational attainment will improve health outcomes and vice versa.

The preschool years are a critical period in the development of self-confidence, pro-social skills, cognitive abilities and of a healthy mind and body (Ben-Schlomo & Kuh, 2002) and studies have repeatedly shown that children learn better when they are healthy (Zuckerman, 2003). However, there are limited studies directly linking children’s physical health with school readiness yet as previously discussed there is evidence that teacher’s rank physical wellbeing as a *key* element in a child’s adjustment to school (Lara-Cinisomo et al., 2008). Recurrent ear problems, for example otitis media have been associated with poor school performance (Thorne, 2004; Zubrick et al., 2006) and children with chronic illness or disability have been shown to have frequent time away from school which can contribute to poor academic performance. Cook, Schaller and Krischer (1985) noted that unhealthy children may also have difficulty concentrating and/or experience behavioural issues related to their ill health which also contributed to absences from school.

Byrd and Weitzman (1994) conducted an analysis of data derived from interviews with parents of 9996 children ages 7 to 17 years who participated in the United States 1988 National Health Interview Survey (United States Department of Health and Human Services, 1988). They found that the effects of poverty, low maternal education, male gender, deafness, speech difficulties, low birth weight, enuresis and exposure to household smoking were all independently associated with poor academic attainment during the first year at school. Recurrent otitis media, low maternal age and child behaviour problems were also related. In addition to this Halle, Zaff, Calkins and Margie (2000), in their review of contributing factors to school readiness, identified immunisations, poor nutrition,

unintentional injuries and dental decay as other important influences. It is clear from studies and reviews conducted by McBryde, Ziviani & Cuskelly (2004), Shepard, Kagan and Wurtz. (1998) and Shonkoff and Philips (2000) that a child's readiness for school and ability to learn are dependent upon physical, social, emotional and cognitive wellbeing and that these dimensions are always interrelated.

Biddulph et al. (2003) were commissioned by the New Zealand Ministry of Education to conduct a best evidence synthesis examining the intricacy of both community and family influences on children's academic attainment. The focus was on children from early childhood through to the end of secondary schooling. The synthesis revealed four categories of findings: family attributes, family processes, community factors and school, family and community partnerships as being influential in both social and academic achievement. This would fit well with the ecological model of school readiness described earlier in this chapter.

2.4 Well Child Surveillance at 4-5 years in Relation to School Readiness

In many countries, including New Zealand, well child services to the under 5-year-olds have been provided through a range of health, education and social agencies. New Zealand is not unique in providing a well child screen prior to starting school at 5 years of age. Internationally there are different approaches to this, many of which are incorporated within a framework of child health surveillance in the under 5-year-old group or as part of a preschool educational programme with school readiness as one of its key objectives. This section provides an overview of certain programmes and activities that have been developed to support school readiness although it is important to note that this is not exhaustive.

2.5 Current School Readiness Initiatives/Screening Programmes

New Zealand

The Before School Check (B4SC) in New Zealand is a free, universal health and wellness assessment for all children aged 4 years old, and is the final eighth core contact check offered as part of the New Zealand Well Child/Tamariki Ora Programme. The B4SC aims to promote health and wellbeing in preschool children as well as identifying behavioural, developmental and other health concerns that may impact on learning at school (MOH, 2008). The goal is to ensure that every child has the best start to school and there are two main components to the check that aim to help support this. Firstly, the support of parents and caregivers to prepare their preschooler for school through the provision of health promotion/education and guidance and secondly, to identify and address any health, behavioural, developmental or social issues prior to a child starting school. Unlike other similar programmes the B4SC, although part of a health surveillance framework is itself a joint Ministry of Health (MOH) and Ministry of Education (MOE) initiative that connects with the MOE Te Whariki; Early Childhood Education Curriculum by aiming to consider the child's wider social context with their learning environment (Ministry of Education [MOE], 1996).

The B4SC is a very structured check with key elements that must be completed by the practitioner. As discussed in the previous chapter these include a child health questionnaire, a developmental assessment, a behavioural screen, oral health screen and a hearing and vision assessment. Interestingly, although achieving increased immunisation coverage is listed as a current priority by the MOH, the administration of the scheduled immunisation at 4 years of age is not a designated part of the B4SC.

An evaluation of first 10 months of the B4SC programme in Hawke's Bay (Wills et al., 2010) revealed early promising results. The aim of the evaluation was to demonstrate the outcomes and lessons learnt of the first 10 months following programme implementation. An intersectoral approach with all major stakeholders, led by Hawke's Bay Primary Health Organisation, was adopted to implement the programme. Eighty four Practice Nurses, Well Child Nurses and independent practitioners were trained in group and individual settings. Local clinical practice and referral processes were established by a Clinical Advisory Group and all referrals received came through a clinical nurse leader to a multidisciplinary triage group. Results revealed that in the first ten months 84% of the cohort of eligible children had been assessed with referrals averaging 55%. Of these referrals 74% had been accepted indicating high quality, informed referrals from practitioners. The researchers concluded that the Clinical Advisory Group had been critical to the early success of the programme. Bringing together the key stakeholders had resulted in a high level of commitment and engagement into the clinical processes and referral pathways. Another factor that had significantly contributed to the success of the programme was the training of nurses who had existing community health skills, relationships with families and good community networks; this was particularly beneficial in the assessment of the most disadvantaged children in the community.

Australia

There are various programmes across Australia that aim to support school readiness and transition to school; many are based on collaboration and co-ordination of services with the exception of the Healthy Kids Check (HKC) (Department of Health and Ageing, 2010). HKC was introduced by the Australian Government in July 2008 and it aims to target every 4-year-old child in Australia for a basic health check before commencing school. The proposed intent being early detection of lifestyle risk factors, detection of

illness and delayed development, health promotion and early intervention where indicated. Its mission is a very similar one to that of the Before School Check in New Zealand with the exception that in order to be deemed complete the 4-year-old immunisation must be given at the time of the check otherwise the HKC remuneration to primary care providers will not be made. There have been critics to the HKC; the Australian Medical Association president, Dr Andrew Pesce (2010), spoke out about the need to redesign the programme to ensure that it targeted the right risk factors in children at the right age and that there was insufficient evidence to support the check in its current form. Alexander and Mazza (2010), concur with this in their review of guidelines and systematic reviews that were relevant to screening prevention or well child surveillance in primary care. They concluded that the components of the HKC could be modified to better reflect evidence based guidelines that target health monitoring of preschool children.

Various other initiatives have been instigated in different states across Australia. Best Start is an early intervention programme funded by the Victorian State Government that aims to strengthen the ability of parents, families and communities as well as early years' services to better provide for the needs of all young children prenatally through to the transition to school. Rather than introducing new services or expanding existing services, this initiative has been designed to increase co-operation, collaboration and co-ordination between services already available. Through better collaboration, there are in theory, better opportunities given to optimise the health, development, wellbeing and learning of children in the state. By using a meta-model of five forms and phases of evaluation, Raban et al. (2006) concluded that Best Start was successful in meeting all of its objectives largely due to collaborative working. No specific wellness checks based on assessing for readiness were performed on children transitioning to school although families were encouraged to take their children to the Ages and Stages health check at 3½ years. The outcome of improved

school readiness was largely based on collective data around the numbers of children and families accessing early childhood and health services as well as reading abilities at school, when this is extracted from the remaining Best Start objectives it is clear that there were no significant differences between those sites which employed the Best Start approach and those who did not. This is a similar result as the Sure Start initiative in the United Kingdom.

Families First is a state wide strategy to improve early intervention services across New South Wales (NSW). The initiative was introduced in 1999 and had identified goals in regards to supporting the preparedness of all children starting school. Families First services are shared across a number of providers but the NSW Department of Community Services takes a lead role in its delivery. Families First is based on a number of principles: early intervention and prevention; service integration and networking; and community outreach and development (Fisher, Thompson & Valentine, 2006). The range of services includes family support workers, supported playgroups, home visiting services, school community services and local community programmes. Results from the evaluation of the Families First Strategy (University of New South Wales Research Committee, 2002) have indicated positive outcomes in improving processes across the services but also revealed that competing demands on these services meant that ongoing planning and delivery was a significant challenge. Again data collected in regards to school readiness and successful transition were based around numbers of children attending school and preschool and the numbers allocated funding for additional support prior to attending school for example; those with developmental delay or hearing and vision difficulties. As with the Best Start programme the focus here is on collaborative working across services not the individual practices that occur within these services.

The Pathway's to Prevention programme was implemented in Brisbane in 2002. Initially the programme focused specifically on children who were making the transition to school and again took a whole community approach. The primary aim was to prevent the development of antisocial behaviour among this group by enhancing their communication and social skills and by supporting families, schools and community groups to provide positive and supportive environments. (Homel et al., 2006). The two main interventions were a Preschool Intervention Programme and Family Independence Programme. The emphasis is placed on the needs of the child as well as the needs of the family and the interventions address multiple factors that can contribute to negative outcomes for children and families in vulnerable situations. There have been both quantitative and qualitative evaluations conducted of the programme and overall results demonstrate an enhancement in school readiness particularly for boys and an overall improvement in behaviour and communication for all children. In addition positive effects were noted on the relationships between families and schools and in the strengthening of families who regularly attended. (Freiberg et al., 2005; Homel et al., 2006).

United States

Head Start started out as an eight week trial programme in the USA in 1965 and is now a national programme that promotes school readiness in low income families with three and 4-year-olds by assisting social and cognitive development through the provision of educational, nutritional, social and other support services. Based on a 'whole child' model, the program provides comprehensive services that include preschool education; medical, dental, and mental health care; nutrition services; and efforts to help parents foster their child's development. The Head Start and Early Head Start initiative is governed by legislation and under the Improving Head Start for School Readiness Act of 2007 it aims to help more children arrive at school ready to succeed. In contrast to the Healthy Kids

Check and Before School Check, Head Start has strict income eligibility guidelines but is more holistic in its approach in that it views school readiness not only from a health perspective but also from an educational and social viewpoint. The Head Start Impact Study (Puma, Bell, Cook & Heid, 2010), a longitudinal study conducted during 2002-2006 followed approximately 5,000 3 and 4-year-old children through their preschool and early school years. Using data collected across cognitive, social-emotional, health and parenting domains the study examined what difference Head Start makes to key outcomes of development and learning and in particular the domains of school readiness. Puma et al. (2010) presented findings from this study which indicated that providing access to Head Start has been shown to have positive impacts on several health related aspects of school readiness particularly language and literacy and they suggest that the key to this lay in its 'whole child' model and provision of comprehensive services. Interestingly these differences between the study group and control group were less apparent by the end of the second year of starting school.

Early Head Start (EHS) began in 1995 as an extension of the Head Start Program and is aimed at even earlier intervention, enrolling pregnant women and families with children from birth to age three. Evaluation of the programme in relation to school readiness have been promising; EHS children when compared with a control group, scored higher on measures of cognitive and language development as well as social-emotional development. (Olsen & De Boise, 2007).

The Chicago Child-Parent Center's (CPC) program was started in the late sixties to serve families in high-poverty neighbourhoods that were not being served by Head Start or similar programs. The CPC provide comprehensive educational support and family support to economically disadvantaged children and their parents. The guiding principle is that children who are given access to early education, readily accessible health services and

active parent involvement at the centre will be better equipped to transition to school and achieve a higher level of educational success in the long term.

The Chicago Longitudinal Study (CLS) (Reynolds, 1991, 1999; Reynolds, Bezruczko & Hagemann, 1997) investigates the educational and social development of a same-age group of 1,539 low-income, minority children who participated in the program. A unique feature of the CLS is that although the project is concerned with child development information the study has also enabled collection of valuable information on early childhood intervention, including classroom adjustment (transition), health, parent involvement, parenting practices, educational expectations of children, teachers, and parents as well as on the school learning environment. Reynolds (1991, 1999) and Reynolds et al. (1997) have reported on the individuals starting in preschool, then annually through the school-age years, and periodically through early adulthood. One of the early findings was that children who attended CPC consistently academically outperformed those who did not. The largest effect was on cognitive readiness at school entry with a difference of about three months of learning performance noted between the two groups. At the 15 year follow-up it was also found that children who attended a CPC preschool program as opposed to those who did not were 52% less likely to be victims of maltreatment; however it is important to note that this is not a generalisable finding as this group of children was at higher risk at the outset. The study is still in progress and is the longest follow-up ever of an established large-scale early childhood program.

Between 2001 and 2004 the School Readiness Indicators Initiative (Walsh, 2005) in the USA worked with 17 states to develop a comprehensive set of school readiness indicators to inform public policy for young children and their families. State teams worked individually and as a group to develop a comprehensive set of measures to monitor school readiness and service system outcomes for children and families. The seventeen states

reached a consensus on a limited number of indicators of children's readiness for school in five domains: 1) Physical well being and motor development; 2) social and emotional development; 3) approaches to learning; 4) language development and 5) cognition and general knowledge (Rhode Island KIDS COUNT, 2007). Each state involved in the initiative is responsible for developing their program components and currently seventeen states in the USA now actively engage with a recognised School Readiness Plan within their varying child health policies. No research studies on the overall effectiveness of these current individual state programs has yet been completed, instead measures of their success are determined by the data collected on each individual domain that relates to school readiness for example the percentage of children enrolled in preschool education, percentage of children passing reading or maths tests at the end of year one at primary school or those requiring additional intervention. This review noted a gap in the reporting of data specifically against the first two identified domains.

Between 1996 and 2001 Xiang and Schweinhart (2001, 2002) conducted a longitudinal evaluation of the Michigan School Readiness Program (MSRP). This programme was also targeted at disadvantaged children and those at risk of school failure. For the evaluation, 338 children who had participated in the state-funded preschool programme and 258 comparison children of similar age and socioeconomic status who did not participate were followed from their entrance into kindergarten in 1996 through to the fourth grade. Using the Child Observation Record (COR) and School Readiness Rating Scale (SRRS) researchers compared non-participating classmates at the beginning of kindergarten with children who had completed the MSRP. Their findings showed them to be significantly more advanced across the domains of language, literacy, social relations, initiative, creativity and music and movement. Children who had attended the MSRP were also found by their teachers to be significantly more ready to learn than their non-participating classmates,

more interested in school, more likely to have good attendance, take initiative, and retain learning. In addition they were stronger in reading, mathematics, thinking, and problem-solving skills and better at working with others. No comparative observations were made of specific health outcomes in relation to school readiness on these cohorts of children.

Medicaid is the United States health program for people and families with low incomes and resources. It is a means-tested program that is jointly funded by the state and federal governments, and is managed by the states. Medicaid delivers a publically funded child health programme, the Early Periodic Screening, Diagnosis and Treatment (EPSDT) which emphasises health promotion and disease prevention as the vehicles to ensure that children are ready for school and able to succeed in life. The programme has three specific features; preventative care, provision of co-ordinated services and a mandate to obtain input from other professional organisations. Unlike the United States school readiness initiatives already discussed, this programme is purely focused on optimising health outcomes of children from birth to 21 years and is not linked specifically with the provision of early childhood education and its measures are not from an academic attainment point of view. A review of EPSDT conducted by Schor, Abrams and Shea (2007) found these features to be extremely valuable in the monitoring of a child's development from a holistic perspective and that children who had access to this programme were more likely to have a smoother transition to school and to be actively able to engage in learning activities. In theory any health and developmental needs would have been detected and addressed early. Although individual States decide on their scheduling for EPSDT the American Academy of Paediatrics (2008) recommend a very similar schedule as outlined through the New Zealand Well Child/ Tamariki Ora Schedule (WCTO) (MOH, 2002) with almost identical screening domains recommended at 4 years of age, prior to school entry.

United Kingdom

In the United Kingdom (UK) there is no set assessment or intervention specifically designed to ascertain school readiness but all children are enrolled into the Healthy Child Programme from birth to 19 years. The Healthy Child Programme (HCP) (Department of Health [DOH], 2009) is a series of reviews, screening tests, vaccinations and information that aim to support parents and to optimise a child's and young person's health outcomes. The HCP programme is very similar to that of the aforementioned WCTO (NZ) and the EPSDT (USA). All families with children under five are universally allocated a health visiting team comprising of Health Visitors, Nursery Nurses, Community Nurse and a Health Care Assistant regardless of their socioeconomic status. Periodic reviews of a child's development are undertaken at specific ages, a total of eight reviews are offered with the final one being undertaken at school entry and is known, not surprisingly as the "School Entry Health Check" (SEHC) and is performed by school nurses in the community. The SEHC is a basic health check with a particular focus on screening for height and weight as well as hearing and vision. No behavioural or developmental screening tools are utilised at this review. No literature was available in regards to research that focuses on the Healthy Child Programme itself.

The Sure Start programme was introduced in England in 1998 with the original intent of the programme design was to focus on the 20% most deprived geographical areas, which included 51% of children living beneath the official child poverty line. It is one of the largest social experiments ever undertaken in the UK. It was broadly based on the Head Start and Early Head start (USA) initiatives and its aims are to deliver the best start in life for every child by bringing together early education, childcare, health and family support for children, parents and communities (Sure Start Unit, 2003). Schneider, Ramsey and Lowerson (2006) conducted a cohort study to address whether children who have been

part of a Sure Start programme do better when they start school. The study compared three groups of children, a total sample size of 682; this included those who had used one of four Sure Start programmes since their inception and the child starting school, children who were not eligible for Sure Start and children who were eligible but had not used Sure Start.

The children were assessed using the “Flying Start” (Durham County Council, 1998) assessment tool which assesses how well a child is doing in a number of areas within the first 7 weeks at school. Activity data was also recorded on which services were used and how frequently the mother and child attended. The findings of the study proved largely inconclusive in relation to Flying Start scores on starting school and Sure Start participation. On average the researchers concluded that if there was an effect of Sure Start use then this may be found in relation to physical development and non-academic areas. Variables such as age on starting school, gender, association between social deprivation and school outcomes, programme quality and records of use of services proved to be sources of bias and made the results more challenging to interpret. Melhuish, Belskey and Barnes (2010) commented that although early research results on all aspects of Sure Start have been slightly disappointing, Sure Start as a programme is evolving, influenced largely by the continued research around it. Increased quality of services, greater attention to accessing the hard-to reach and greater exposure of the programme have begun to positively contribute to improved outcomes for children and their families in the last few years.

Canada

Canada has taken a very positive and proactive approach towards assisting in the successful school transition of 5-year-olds and a number of programmes/initiatives are available across the country. Health care in Canada is delivered through a publicly funded health care

system, which has most services provided by private entities and it is guided by the provisions of the Canada Health Act (1984). The government assures the quality of care through federal standards but does not participate in day-to-day care or collect any information about an individual's health; this remains confidential between a person and his or her physician.

Many of the programmes discussed here have not undergone scientific evaluation therefore their effectiveness has yet to be determined. The majority focus on the educational aspect of school readiness and do not necessarily adopt a 'whole child' approach. However, leading the way is British Columbia where the Ministry of Health is working in collaboration with the Ministry of Education and the Ministry of Children and Family Development on initiatives for early learning and healthy early childhood development. Their collaborative working is based on the belief that by integrating child health and development with early learning the child is more likely to succeed in the school years. It is important to note that the term 'Kindergarten' in the Canadian context means the first year at school.

Human Early Learning Partnership

The Human Early Learning Partnership (HELP) is a consortium of six universities in British Columbia that contribute to new knowledge in early childhood development through interdisciplinary research. The Ministry of Child and Family Development formed a partnership with HELP in 2002/2003 to take a key research and leadership role in advancing early childhood development and enhancing the quality of children's early years. In 2008/2009 the Ministries of Education and Healthy Living and Sport joined this partnership, strengthening support for early childhood development research initiatives in

British Columbia. The HELP⁴ website provides further information about the partnership and their focus.

One of the key HELP initiatives has been the School Readiness to Learn project and the development of the Early Development Instrument (EDI). The EDI is a research tool that assesses the state of children's development in kindergarten and is completed by kindergarten teachers in partnership with British Columbia's School Districts. The EDI was developed by Doctors Dan Offord and Magdalena Janus at McMaster University in Ontario, the primary focus of the tool is to provide information on school readiness based on the five early childhood development indicators (Janus et al., 2007). The EDI assesses children's readiness to learn in the school environment in five general domains: physical health and well-being; social competence; emotional maturity; language and cognitive development as well as communication skills and general knowledge. The EDI measures against developmental benchmarks rather than educational attainment. Today a number of provinces in Canada use EDI maps and data to plan early childhood investment, policy and programme development, some also use EDI data for programme evaluation.

Toronto First Duty (Ontario)

The Toronto First Duty (TFD) model (Bertrand, 2009) was established in 2001, the goal being to develop a universally accessible service that promoted healthy development of children from conception through to primary school. A professional team of kindergarten teachers, early childhood educators, family support staff and teaching assistants plan and deliver the programme. The rationale for integrating services in TFD was to provide better support for the development of young children through 6 years of age, along with support for their parents in parenting and for accessing quality child care. Children and their families are linked to specialised resources as required. TFD enables the consolidation of

⁴ See <http://earlylearning.ubc.ca/>

regulated child care, kindergarten and family support services into a single accessible programme located in primary schools and co-ordinated with early intervention and family health services.

The programme was introduced in two phases. Phase one focused on the implementation of the model in five sites over a 4 year period, Phase two focused on policy change, education and further development of the model. Research in the form of summative and formative evaluation during and at the end of phase one and two was conducted by Corter et al. in 2009. Results indicated that the TFD model was successful at the service/frontline level but highlighted issues around both parental and community engagement, accessibility and the importance of fostering interagency collaboration. The main effects of integrated services on child outcomes were measured using the EDI tool previously discussed. A demonstrable improvement in social, emotional, and language/cognitive skills across most of the TFD sites was noted. The TFD model has informed the development of many other programmes and local policy developments in early childhood in Canada in recent years.

2.6 Ethical Issues of Screening for school readiness

Interventions for school readiness from a health perspective can range from assessing and treating children through to the adoption of public health policies that support children and their families. At the present time the majority of school readiness programmes still focus primarily on the academic and cognitive abilities of the child whilst seemingly ignoring the socio-emotional skills and environmental factors that can influence a child's readiness to learn (McAllister et al., 2009). However, these particular factors are not able to be conveniently measured through the use of a tool and require skills in engaging and interviewing families in order to elicit further information as well as having resources available to meet identified needs. As already discussed, the assessment of school readiness can vary

greatly and Garrett (2001) cautions against tests which can easily be incorrectly applied and interpreted increasing the risk of labelling a child or wrongly suggesting that they are not ready for school. Furthermore, when tests are conducted by individuals who have a limited understanding of the norms of child development or little training in the assessment tools, this can compound the problem (Schor et al., 1995).

There are many conditions in early childhood where early intervention has shown to be of benefit such as development, language, behaviour and psychosocial issues. The nature of these areas can be complex and is often not appropriate to apply a screening test and categorise into a pass or fail on the basis of the results. Many school readiness programmes have traditionally been targeted at children from low-income and disadvantaged families but the New South Wales Parenting Centre (NSW Parenting Centre, 2003) states that they should be universally applied. They note that where programmes are only aimed at the most vulnerable the numerically larger number of middle class children, whose life chances may have been compromised by a bad start, will miss out on the benefits offered.

Screening in itself raises important ethical issues and programmes must be based on quality evidence that shows they do more good than harm (Holland, Stewart & Masseria, 2006; National Health Committee, 2003). The possible advantages of early detection programmes should always be assessed in terms of availability of resources to provide effective interventions. Too often the delivery of screening programmes is not equivalent to the delivery of services that address the issues identified from them.

2.7 Nurses Experiences of delivering Well Child Services

As mentioned at the beginning of this review there is a dearth of literature available that specifically focuses on nurse's experiences of delivering well child care services in the

community, however the literature pertaining to nurse's perceptions of their roles in general did provide an applicable insight. Yarwood (2008) undertook a study in New Zealand to explore community nurses interactions with families in their everyday practice. The study explored the perceptions of eighteen nurses including public health nurses, practice nurses, district nurses, well child nurses and rural health nurses. These nurses identified two key issues that influenced their ability to work effectively with families: lack of time and restrictive contractual arrangements. Philosophically the participants wanted to be able to nurture the practitioner/client relationship through dialogue and the establishment of a good working relationship but their experiences of not being able to do this meant that successful outcomes and interventions were often delayed.

Magnusson, Lagerberg and Sundelin (2011) compared both parents and nurse's perceptions of child health services in relation to whether or not the nurse's role was entirely child focused or generalist (all age groups). The two groups of nurses were required to complete a questionnaire about their job satisfaction and the parents completed one which related to service satisfaction. The results revealed that child focused nurses experienced a higher degree of job satisfaction and the mothers were more satisfied with the care provided by them compared to those working with mixed age groups. This study suggests that further exploration into the health effects of paediatric versus generalist nurse approach to the provision of well child care is warranted. This is further supported by Hlahane, Greeff and Du Plessis (2006) who conducted a qualitative study to explore the perceptions of nurses working in primary health care clinics had of their expected level of skill and their actual skills in delivering primary health care services. The study compared three groups of nurses in South Africa who worked in primary health care but had differing levels of training in the provision of primary health care services. The findings revealed that the less skilled that the nurses perceived that they were, the less confident and more negative they felt towards

their roles. It is clear from these studies that nurses working in primary health care desire to have the appropriate set of skills and knowledge to do so and that they are sufficiently aware of when they may not.

Norwegian public health nurses were interviewed about their reflections on their daily practice in a study conducted by Clancy and Svensson in 2007. The focus of this study was around the ethical and moral considerations of these nurses in relation to their clients and their approach to their everyday work. The nurses identified issues around the ethics of responsibility in public health nursing; personal responsibility, establishing boundaries, having time to care, worry, and being alone. Despite experiencing this burden of responsibility, the nurses they felt that their work was important, they felt needed and this increased their sense of job satisfaction.

It is clear from the research presented that in order to be successful in delivering timely and quality care; nurses in the community require sufficient support to do so. Adequate training, ongoing education, supervision and opportunities for reflection need to be provided and care delivery programmes should be structured in a way that supports the establishment of the practitioner/ client relationship.

Conclusion

In this chapter the literature reviewed has explored the concept of school readiness from a health perspective, and the current screening programmes that pertain to this both nationally and internationally. The ethical issues of screening have been considered as well as nurses experiences of their roles. This study is relevant considering the lack of studies that pertain to nurse's experiences of delivering well child care and of adhering to a structured method of overall assessment. It also positively contributes to the knowledge

around the interconnectedness of health and 'readiness to learn' in relation to a child starting school for the first time. The following chapter describes the methodology used for the research.

Chapter 3

RESEARCH METHODOLOGY

Introduction

The methodology and methods that were employed for this research will be discussed in detail in this chapter. A qualitative design using semi-structured individual interviews and thematic analysis will be described. The ethical considerations and steps taken to establish rigour will also be presented.

The aim of the research was to explore the experiences of nurses who currently perform the Before School Check (B4SC) Using semi-structured interviewing the nurse's had the opportunity to comment on all aspects of the check and any issues that they may have experienced. The process of thematic analysis then determined the common emerging themes.

Recommendations based on the research will inform providers on how the programme might be improved and what additional resources may assist in assessing the health and well being of the 4-year-old and their family, and thus assist the transition into school. The research will not specifically be generalisable to other communities but it will add to the body of knowledge regarding the provision of health checks to 4-year-olds and of the nurse's experiences of doing so.

3.1 Conceptual Framework

The Government funded Well Child/Tamariki Ora service is a screening, surveillance, education and support service offered free of charge to all New Zealand children and their families from birth to 5 years. The primary objective for providers of this service is to support families and caregivers in optimising their child's developmental and health status thereby establishing a strong foundation for ongoing healthy development. Within this framework there is a total of eight core contacts that every child and their family are entitled to receive from birth through to 5 years, the B4SC at 4 years of age being the eighth and final one (MOH, 2010).

The B4SC incorporates three screening tests; surveillance of a child's growth and questionnaires about a child's development and behaviour. The screening questionnaires are based on parental evaluation and surveillance of growth is done through weight and height measurement. There is no suggested 'hands on', interactive developmental assessment performed in the current format.

In the B4SC Handbook for Practitioners (MOH, 2008) it states that the check will "ensure that children start school able to participate to the best of their ability" (p.3). Whilst health, behaviour and development have been found to be related to a child's readiness for school, the importance of external factors such as family circumstances and home environment have also been linked (McBryde et al., 2004). These factors are not able to be conveniently measured through the use of a tool and require skills in engaging and interviewing families in order to elicit further information as well as having resources available to meet identified needs.

3.2 Methodology

For this research a qualitative research design was chosen, informed by critical theory. Qualitative research aims to explore the behaviour, feelings and experiences of people and why this is so (Holloway & Wheeler, 2010). Qualitative design tends to be holistic and is particularly useful when exploring change and behaviour. Often in qualitative research the study design evolves over the course of the project as the researcher discovers previously unknown or not understood viewpoints and realities. It is important that the researcher remains open to this if he or she is to adhere to the holistic nature of qualitative study (Polit & Beck, 2008). Gaining an in-depth understanding of a particular phenomenon is the main aim of qualitative research, its focus on understanding the experiences and world views of the participants usually helps define what the problems are rather than on the number of people affected by them (Grbich, 1999). A qualitative design is particularly useful in nursing research as it can help to provide insights which alter clinical practice as well as providing in-depth description which enables readers to make sense of clinical reality (Morse & Field, 1996).

Critical theory, which forms the basis of critical ethnography, aims to question societal structures and practice by focussing on transformation and change (Minichiello, 2004). Polit and Beck (2008) simply define critical theory as “an approach to viewing the world that involves a critique of society, with the goal of envisioning new possibilities and effecting social change” (p.751). Critical theory is a particularly useful approach when exploring health promotion and policy as it allows the researcher to cast a critical eye over current social beliefs and practices and to explore the roots of their existence, by doing so one is better able to justify changes and developments. On this basis using critical theory in this study made it ideal for exploring health provider’s views on the B4SC in its current format.

Informed in part by the works of Jurgen Habermas (1929 -) this research begins to explore the notion of the health professionals view of the 'norms' in relation to a 4-year-old's expected physical and emotional development compared to that of the child's family and the possible dangers of imposing these constructed 'norms' against whether a child is deemed "ready" for school or not. Outlined in his work "Theory of Communicative Action, Reason and the Rationalisation of Society" (Habermas, 1984) Habermas believed that there are elements of our social structure and culture that deny individualism and growth; medical control being one such element (Grbich, 1999). At the forefront of Habermas' work has been the task of interpreting current situations and he actively encouraged scrutiny, always asking the 'why' question (Habermas, 1984; Scambler, 2001). In relation to health Habermas' views promote more open communication between health professionals and their clients, empowering them to take control of their lives and their health. Drawing on Habermas' work, Murphy and Fleming (2010) noted that nurse's personal and professional values are inextricably linked and therefore not only do the patient's feelings and emotions form part of the nurse/patient relationship but the nurses do as well. This is an important feature to recognise in relation to this study as the researcher begins to explore the nurse's experiences in their roles. Habermas also suggests that the challenge for the healthcare system is not to become self-serving but to create a better balance between both its needs and the needs of the people it serves. In order to achieve this, if one accepts Habermas viewpoint, a holistic approach to healthcare and one which is planned and delivered in a multidisciplinary way is more likely to be successful in optimising health outcomes in the long term.

Qualitative research by its nature does not tend to produce generalisable results but through gathering descriptions of people's experiences it can positively contribute to what is already known empirically about the phenomenon under study. Whilst a quantitative

study might produce data that a phenomenon exists, a qualitative study may reveal *why* it does. It is hoped that this study will contribute to the body of knowledge that already exists around assessing for school readiness and encourage renewed discussion around appropriate ways in which to do this effectively if at all (Holloway & Wheeler, 2010).

3.3 Ethical issues

Ethics approval for this study was granted by the New Zealand Health and Disability Ethics Committee (Appendix 10 & 11). When undertaking qualitative study, Goodwin (2006) believes that three main issues; anonymity, confidentiality and informed consent are particularly important to address. Ensuring anonymity requires more than just changing names of the participants; it is essential that any potential means of identifying a participant is addressed (Richards & Morse, 2007). In this study the researcher ensured that the participants received all relevant information about the study through a study information sheet (Appendix 5). The information sheet stated that participants would be required to give informed consent to participate in the study and were free to withdraw at any time. Originally the information sheet had included the option to partake in a focus group; however this was not possible due to recruitment challenges and the timeframe for completion of the research.

The researcher checked all written material to ensure that participants and location were not identifiable in any way. Confidentiality means literally to 'keep things private' and is a separate issue from anonymity. The difficulty in a qualitative research study that involves interviewing and discussion is that the results of these usually form the data that goes on to be analysed (Goodwin, 2006). Participants in this study were assured that the researcher was undertaking the research as part of her university requirements and not on behalf of any other party. Whilst the results of the study will be relayed to interested parties, the

guarantee was given that participant's identity would always be protected. Participants were asked to sign a transcript release form (Appendix 8) in which they agreed to the release of information from the transcript of the interview for use in a report or publication.

The principle of informed consent lies in the fact that participation is voluntary and that participants are made aware of both the benefits of the research and the personal risks they take by being a part of it (Holloway & Wheeler, 2010). Ethical issues in relation to interviewing centred around the need to protect the participant and the risks that can occur as a result of human interaction (May, 1991). These risks include embarrassment, anger, conflicts of opinions and violation of privacy. Using the interview guide (Appendix 9) and being aware of the need to be prepared to compromise between the research goal and the needs of the participant minimised the chance of this happening. Interviewing and using the researcher's peers as participants in this study meant that special factors needed to be taken into consideration. The most important of these was the question of trust, that the researcher did not put subtle pressure on her colleagues to agree to participate in the study and that she allowed them to develop their own ideas and not be influenced by what they thought the researcher may want to hear (Holloway & Wheeler, 2010). This was a significant concern to the researcher in this study and a conscious effort was made not to assume shared perceptions with peers on the phenomenon under study. Whilst the researchers own personal experience of delivering the B4SC enhanced her ability to elicit in-depth information, she was vigilant about not sharing her views with the participants throughout the duration of the study. Field (1991) and Goodwin (2006) conclude that if the researcher remains aware of the effect of their experience and their own socialisation may have had on the research process, then they are more likely to consciously reduce potential bias in their analysis of the data.

3.4 Rigour

It is important that any qualitative research can demonstrate that it is both competent and thorough, that the design is tight and procedures used are trustworthy (Grbich, 1999, Holloway & Wheeler, 2010). Minichiello, Aroni and Hays (2008) suggest that in individual interviews the researcher will never be ultimately sure that she has understood all the perceptions and ideas of the participants but with a sound knowledge of the topic is more likely to increase the accuracy of the interpretation. For this study the technique of 'member checking' was employed where the researcher gave the participants a transcript of their interview and her interpretation of their words and asked if her summary of the participant's perspective was representative of what they had actually said and/or meant. This gave the participants the opportunity to change or challenge any mistakes and enabled the researcher to assess her understanding and interpretation of the data collected (Holloway & Wheeler, 2010). Lincoln and Guba (1985) regard member checking or respondent validation as it is sometimes called, as the strongest available check on the credibility of a research project.

3.5 Reflexivity

It was important for the researcher to maintain a level of self reflexivity in order to assist in improving rigour in this study. Having worked as the Clinical Specialty Nurse on the B4SC programme the researcher had inevitably entered into the research with a set of her own beliefs and perceptions around the check itself (Grbich, 1999, Holloway & Wheeler, 2010, Morse & Field, 1996). It was important to remain aware on how these values could inadvertently impact on interaction and interpretation of data in the research setting. This self- reflexivity was ongoing throughout the study, not only in regards to the researchers

own experiences but also to any relationship between the researcher and the participants and the way in which that could potentially affect the research.

Bassett (2004) suggests that comparing the researcher's perspective with that of the participant has the potential to enhance the research by creating a third dimension or new perspective. This illustrates an important point; that in qualitative research the researcher is positioned "in" the research rather than external to it which is why the process of reflexivity for adding rigour is so important. Morse and Richards (2002, p.170) remind the researcher that qualitative enquiry "constantly challenges assumptions and the obvious, reveals the hidden and the overt, the implicit and the taken-for-granted and shows these in a new light" although challenging, without this the research would lack depth and ultimately usefulness.

In the individual interviews an interview guide (Appendix 9) was used in order to help reduce bias by the use of discussion generating questions, not ones which would be too directive. The interview guide also served to ensure that the researcher was collecting similar information from all participants but it was not followed strictly as it was important that the participant had some control over where the conversation went with the sharing of her experiences (Holloway & Wheeler, 2010). At times it was necessary to guide the participants back to the focus of the research but this did not interfere with the process of good data collection at all.

3.6 Methods

3.6.1 Participant Selection

Mixed purposeful sampling was the method used to recruit participants for this study. It is usual practice for qualitative researchers to select participants for the study based on the area of interest (Bassett, 2004; Llewellyn, Sullivan & Minichiello, 2004). The criteria for inclusion were nurses who had delivered and/or were still delivering the B4SC to 4-year-olds within the central Auckland region. The participants in the study consisted of seven registered nurses who performed or had performed the B4SC in the central Auckland region as part of their practice, working in primary care as Practice Nurses, Plunket Nurses and Public Health Nurses. As the participants were essentially a homogenous group, it was not necessary to have a large number for this research study (Holloway & Wheeler, 2010). During the interviews the ensuing discussion was robust, meaningful and the participants demonstrated a great depth of understanding of all aspects of the B4SC assessment. This added further credibility to the appropriateness of this method of sampling as the participant's ability to contribute meaningfully to the study enabled a more accurate exploration of the research topic (Mays, 2006).

Initial contact for recruitment was made through both a Community Paediatrician and a Senior Nurse both uninvolved in the proposed research, they were given a list of identified nurses who met the above criteria. The Paediatrician and Senior Nurse contacted them, via e mail, with an attached information sheet which outlined the research purpose and invited them to indicate their interest in being involved. The researcher's contact details were passed on to those who confirmed their interest in taking part. The use of an intermediary in the initial recruitment process minimised the risk of feeling pressured to participate. This can be an issue when the researcher is also a peer of the participants (Minichiello, Madison,

Hays & Parmenter, 2004). Coghlan and Brannick (2005) emphasised the importance of the researcher always being aware of and examining their own actions in order to reduce risk and bias. In this study, where the researcher had personal experience of the delivery of the B4SC Field (1991, p.91) suggests that it is possible to become “one’s own expert informant”, and that this requires a delicate balance between subjectivity and objectivity. Field concludes that in this scenario it is important to consider the issue of reflexivity and that the researcher remembers that although she is familiar with the topic being studied, new insights will come to light through the research process and it is her ability to objectively reflect and explore this further will reduce the degree of naturally occurring bias.

Where a potential participant had expressed an interest in being part of the study, further explanation of the study was given by the researcher, who subsequently gave prospective participants a study information sheet (Appendix 5). The participant was required to complete a consent form (Appendix 6) stating that they had read and understood the information sheet provided and were willing to be an active participant.

3.6.2 Data Collection

Field based research was undertaken in the form of individualised interviews with registered nurses who had previously performed the B4SC. The individualised interviews were semi-structured and conducted using open-ended questions pertaining to the research topic; this enabled the participant to pursue an idea they may have about the topic with more freedom and this greatly aided the capturing of the meaning and emerging themes. This approach also allowed the participants to further explore their thoughts on the implementation and content of the B4SC, and this gave the researcher insight into how this may or may not have affected their practice (Morse & Field, 1996; Polit & Beck, 2010; Pope & Mays, 2006). Semi-structured interviewing is a useful approach when the researcher

knows many of the questions to ask but cannot predict what the responses are going to be (Morse & Field, 1996; Pope & Mays, 2006).

Participants in this study were required to complete and sign a consent form (Appendix 6) having read and understood the information sheet about the study. Informed consent was also required for permission to tape the conversations at the individual interview stage. The audio tape recordings were heard only by the researcher and the transcriber, who had signed a confidentiality agreement (Appendix 7). Once the transcriber had finished with the audiotapes, these and the consent forms were kept in a locked filing cabinet.

An interview guide (Appendix 9) was used to ensure that the focus of the interview was kept to that of the study topic. The guide listed the topic areas that the researcher wished to cover, concentrating mainly on the nurse's experiences of undertaking the B4SC assessment and followed lines of enquiry related to this. The questions used were flexible enough to be able to include new insights as they came to light. The individual interview provided an opportunity to invite recall from the participants; for them to reveal and begin to interpret experiences into meaningful discussion (Holloway & Wheeler, 2010).

The location and time of the individual interviews were determined by the participants and all interviews were audio taped. The taped recordings were transcribed into narratives and returned to the participants who had the opportunity to confirm their authenticity. This process is known as member checking and the aim of it is to exclude errors of fact and to ensure that viewpoints are interpreted authentically thereby adding rigor to the study (Craig, 2007). Participants were required to sign a transcript release authority (Appendix 8) after they had completed their check of the transcript and were satisfied with the contents.

3.6.3 Data Analysis

The individual interview transcripts formed the data for this study. The process of analysis began immediately after each interview was recorded. The tapes were transcribed within ten days of the interviews being held which allowed the researcher time to read the transcript with the interview still current in her mind. Thematic analysis of the data was performed using a general inductive approach (Thomas, 2006). This approach provides a simple and straightforward way of deriving themes within a large amount of textual data. Using a 3 stage process the researcher condenses, organises and establishes links between the research aims and the findings. The tapes were listened to repeatedly during the analysis and hard copies were made of the transcripts to allow them to be easily re-read and commented on using notes and highlighters. Through this process as well as with the researchers own experiences, familiarisation with the data was easily achieved and the task of looking for patterns and meanings could begin.

As recommended by Holloway and Wheeler (2010) and Grbich (1999), the researcher immersed herself in the data in order to become more sensitive to the emerging issues of importance and to get a sense of the participant's perceptions. This also enabled the researcher to uncover any ambiguities or inherent problems with the data. Following this period of familiarisation the creating of categories or coding began. Coding is a process of condensing data into relevant categories (Boyatzis, 1998). Initially, topic coding was used to help separate the subject matter that had arisen out of the individual interviews. The researcher searched for similarities and differences and grouped these into categories thereby condensing the data down. Topic coding is described by Morse and Richards (2007) as a way of categorising data in order that it can be conveniently retrieved later for further description and analysis. However, Holloway and Wheeler (2010) claim that there are some inherent problems with coding which in this study the researcher made every

effort to minimise. Firstly, the loss of a holistic view of the topic, this was particularly relevant as the original intent of the B4SC was that it provided a holistic overview of the child prior to entering school and that it was the combination of the interventions that would provide this. Secondly, the potential to lose important information as it did not fit any category. Efforts were made to explore alternative view points for clarification but in order to answer the research question and to valuably contribute to the body of knowledge that already exists, the most commonly recurring themes had to remain the main focus.

Once coded, thematic analysis was employed to identify recurring themes in the narrative data. The principle of thematic analysis is that it focuses on drawing out themes from interviews (by identification of statements or phrases) that are essential to the topic (Braun & Clarke, 2006; Holloway & Wheeler, 2010; Polit & Beck, 2008). Once identified these themes become the centre of reflection and interpretation when researching further through the literature. It soon became obvious that there were five categories into which the majority of the interview data could be placed. As already described these categories were initially created using codes related to the questions posed in the interview guide. (Boyatzis, 1998; Browne, 2004; Pope and Mays, 2000). Within these categories themes began to emerge as well as a number of sub themes, some of which appeared or were of relevance in more than one of the main themes. On further analysis it also became apparent that there was one overarching, dominant theme and four secondary related themes arising from this. Without this dominant theme the secondary related themes could and would not exist, a causal type relationship. These secondary themes also appeared to be interrelated. This made presenting the findings more challenging.

Under the dominant and secondary themes, lists were made incorporating excerpts from each of the interviews that were relevant to that category. The data were compared across the interviews again and from here the list was further condensed into the most prevalent

sub themes, those occurring across all of the interviews and directly related to the research question. This analysis of the frequency and extensiveness – how many different people referred to the theme, provided the best evidence in considering which themes were the most significant to use in the final report.

The data was re-examined one final time to confirm relationships between data and the identified themes and to endeavour to further code what was initially put into a ‘Miscellaneous but Interesting’ category. Through this process of re-examination almost all of the contents of this category were able to be re-assigned to sit within one of the identified sub themes. Internal consistency was not an issue as the researcher was the only person doing the coding and analysis.

Conclusion

This chapter has described the research methodology and method used to answer the research question. A total of seven semi-structured interviews were conducted with nurses who had delivered the B4SC as part of their daily practice. Each interview was analysed using the process of thematic analysis resulting in the emergence of specific themes. In the following two chapters the findings will be presented; Chapter Four is entitled “It’s all in the Delivery” and shares the findings in relation to the nurse’s experiences at the time of administering the B4SC. Chapter Five is simply and descriptively named “On Reflection”. Here the nurse’s reflections ‘post check’ are shared, the unpredicted and unexpected experiences.

Chapter 4

FINDINGS: IT'S ALL IN THE DELIVERY

Introduction

In the previous chapter the research process was outlined giving details of the methodology for the study. As discussed, data were gathered from the interview participants and analysed using a general inductive approach (Thomas, 2006). This resulted in the emergence of one dominant theme and four secondary related themes. Within these four secondary related themes a number of sub themes also surfaced.

The participants were given the opportunity to comment on all aspects of the interviews, check the data and raise any issues that they may have experienced. The data presented over the next two chapters has enabled the researcher to 'step inside' the Before School Check (B4SC), to hear about it through the different practitioners annotations and to gain an insight into the challenges that each one has faced. In their interviews the participants have described not only their experiences of actually delivering the B4SC but also their reflections on the process; the barriers and difficulties they experienced and their views on its further development. The less positive feedback has been centred on the restrictions of working within the confines of a very structured well child check and in the utilisation of the specific screening questionnaires.

The findings of this research will be presented over the following two chapters: Chapter Four will focus on the process of delivering the B4SC and Chapter Five will present the findings related to the aftermath. This is centred around reflections on practice. In this first chapter two themes will be presented; firstly, the dominant theme entitled "Construct

constraints” which is accompanied by four simply and descriptively labelled subthemes: “health history” “developmental screening”, “behavioural assessment” and “hearing and vision” and following this, a secondary related theme “Time” which has no subtheme. Throughout the finding’s chapters each theme is introduced with a relating quote from a participant.

The unexpected degree of consensus across the data made the analysis very clear on what the emerging themes were, although there were obvious variations in aspects of reporting around them. The significance of the relationship between the dominant theme and the secondary related themes should not be overlooked; without one the other would not exist. This concept will be incorporated into the discussion (Figure 1).

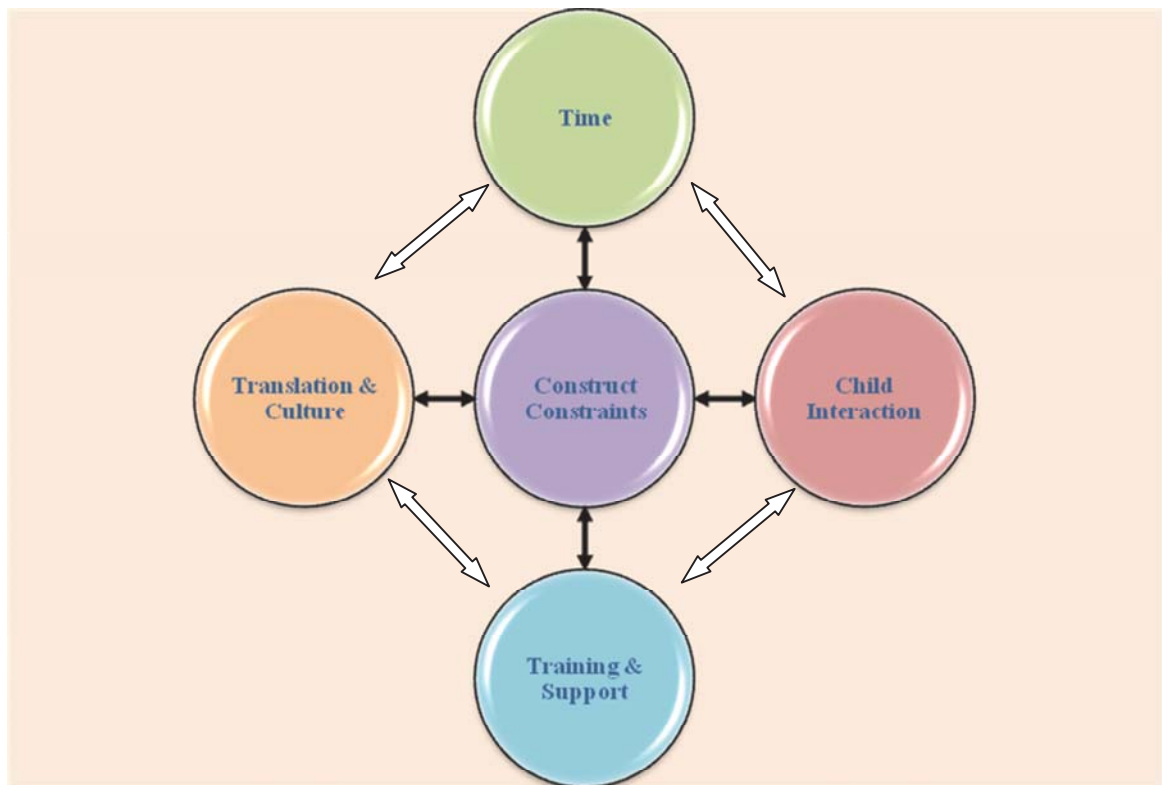


Figure 1: Interconnectedness of Identified Themes

4.1 Construct Constraints

I sometimes question our health service, it's very bitsy – a bit here and a bit there...

The B4SC is largely constructed around a set of data collection measures: the Child Health Questionnaire (CHQ), Parental Evaluation of Developmental Status (PEDS), Strengths and Difficulties Questionnaire (SDQ) and Hearing and Vision screening. It is constrained, formed and shaped by the screening measures and the documentation that the nurse must complete during and after the check; the nurse is required to interpret the results of these measures and give feedback to the caregiver. In this first chapter data relating to the nurses experiences of working within the confines of a very structured well child check using these measures will be presented. For clarity of reporting the measures will be introduced individually as there were specific findings related to each that warrants exploration and discussion.

4.1.1 Health History

Obtaining the child's health history using the Child Health Questionnaire (CHQ) usually formed the initial phase of the check; the questionnaire is designed to look for general information about the child and their family including information about existing health concerns and access and or engagement with services. The CHQ was specifically developed for the Before School Check and it was anticipated that any concerns arising from it would result in a referral to the child's General Practitioner (GP) and/or Child Health Specialist. Screening for health history is not a new concept; most initial contacts involving a health consultation with patients will begin with establishing their health background and highlighting any significant concerns. The participants found the CHQ useful to use with the parents and felt that the completion of it and measurements of weight and height made for a clear starting point for further dialogue. However, some of those interviewed argued

that where there is an already established client/practitioner relationship, revisiting health history at each subsequent consultation can be unnecessarily repetitive. Feedback from the nurses working in General Practice implied that being required to complete the CHQ was time consuming and tedious as the practice already held most of the information regarding demographics and past medical illnesses.

I don't fill in the Child Health Questionnaire because there are 3 pages and most of that is on our record, like we have the child's name, NHI, caregivers and things like that...

(P2)

Interestingly neither of the two participants quoted felt that revisiting the questions in the CHQ to update information held, was of importance at the time of the check. This decision appeared to be made due to time constraints:

We, as a practice team, decided that we were wasting time and parent's time completing the Child Health Questionnaire... (P1)

Concerns were raised by all the participants about the lack of screening questions in the CHQ that were of particular significance to this age group; namely toileting, nutrition and sleep habits:

The medical questionnaire was literally just a questionnaire – it was a basic question and answer thing but there were a few things missing off it... (P5)

The health questionnaire was fairly basic when we were using it so we actually did develop it so that it included, sleep, nutrition, toileting and we made it a lot more robust and holistic health assessment... (P7)

In all the individual interviews participants revealed that they had developed ways in which to incorporate questions around these three areas; sleep, nutrition and toileting in their checks. A popular concept discussed was the need to take this even further - of wanting to provide a more comprehensive and holistic check but that the current structure of the B4SC did not allow for this:

It was more basic, it was more about vaccinations – sort of a health history...we wanted to do the best, highest quality checks and not miss anything... the most comprehensive check and in order to do that you need to cover every area, sort of a very holistic approach to the health of the child and that didn't come through in the Ministry's check... (P7)

Each participant seemed to feel an instinctive need to add to the CHQ and this appears to centre on the nursing tradition of viewing the patient as a 'whole', of assessing and promoting not only physical and psychological wellbeing but also taking into account the environment in which they function (McEvoy & Duffy, 2008). Nursing is holistic by nature and the brief, generalist approach offered in CHQ appeared to challenge this. Hall (2004) and Talen, Stephens, Marik and Bucholz (2007) concur with the importance of a holistic approach to routine Well Child screening and strongly advocate that when undertaking any child health surveillance activities parents' anxieties and the child's environment are acknowledged. The participants in this study appeared to favour this 'Family Centered Care' approach (Bruce, Letourneau, Ritchie, Larocque, Dennis & Elliott, 2002), as they were aware of the influences parents and families had in the growth and development of their children but were frustrated that the structure of the B4SC did not allow for the assessment of family strengths and functioning styles.

The assessment needs to be done in a social context as well, because there may be a dysfunction in the family too – perhaps there needs to be some sort of family functioning tool that comes in so you can match what’s actually going on... (P5)

The Ministry of Health (MOH) B4SC contract and funding structure was identified as another potential barrier to providing a more holistic approach. Working with funding constraints and against tight Ministerial targets was perceived by the participants to affect the ability to provide a holistic check; one that was meaningful, robust and not simply a ‘tick box’ exercise. The dangers of setting targets or ‘pay-for-performance’ incentives are that they tend to focus on aspects that are the most obvious and easily calculable. (Elkan & Robinson, 1998; Petersen, Woodard, Urech, Daw & Sookanan, 2006). The provision of holistic care and the quality of health care delivery are, in general, less easily quantified and this was frustrating for the nurses interviewed who felt that their ability to do the check comprehensively was compromised by the funding structure imposed:

I sometimes question our health service, it’s very bitsy. You know bits here and a bit there. Just a contract, just funding, but we don’t look at the family in a holistic way, it’s not just about a 4 year old, it’s about the whole child, the whole family... (P6)

If it’s just screening for funding and numbers and you don’t actually look at the whole child then the screening is pointless...(P1)

Two of the participants argued that remuneration based on numbers of children receiving the check was unfair on providers. Even though every effort would be made to contact and arrange appointments for children, many would not attend on the day and this was seen as largely out of the practitioner’s control. Clinics based in lower decile areas were identified

as been particularly prone to non-attenders and this would often result in an hour of wasted practitioner time.

The thing that blew the numbers for us at the end of the day was that we did have a lot of DNAs; we had a lot of people who didn't show up particularly in the low decile areas. It was something we had no control over and we could do nothing about but it did affect our numbers of course... (P5)

4.1.2 Developmental Screening

How a child develops is a powerful determinant of health in adult life (Talen et al., 2007) and developmental surveillance has been at the core of most Well Child programmes for some time. Although there are many screening tests that can greatly improve detection rates of abnormal development these have not always been popular in primary care due to the length of them, training required and perceived accuracy. The B4SC employs the Parental Evaluation of Developmental Status (PEDS) as its developmental screening test; a questionnaire to elicit parental concerns around development and behaviour. The PEDS has a high degree of sensitivity and specificity when compared with other more 'hands on' developmental assessments (Koesnandar & Pustika, 2010). Despite claims that the PEDS assessment is easy to administer (Armstrong & Goldfield, 2008; Glascoe, 2000; Koesnandar & Pustika, 2010); the participants in the study did not always find this to be the case, in particular when working with families where English was a second language and/or literacy levels were low. If the parent had attempted to complete the questionnaire independently often the nurse found they had to revisit all or part of the tool to confirm that families had really understood what was being asked:

The PEDS form for the population I work with – the Pacific Island, predominately Samoan and Tongan, they find this quite confusing because a normal answer is circled

'No', whereas for a lot of the Pacific Families they circle 'Yes' all the time because that's a correct answer. So often they would be ticking yes and then on discussion they'd realise they should have circled 'no'... (P3)

I think the PEDS is a very useful guide for parents but I think it needs to be used with a great deal of care, because I think sometimes parents go through and completely misunderstand the form, so I would have the odd parent who would circle "yes" to everything when they actually meant "no". So you did need to clarify with them that they had understood the form and this was particularly the case of parents who had English as their second language... (P5)

One participant found it *unhelpful* for parents to complete the form independently:

I find it better to go through the PEDS form with the parents and sometimes I feel it would be better if I answered the questions myself based on my observation of the child at the time but I know that's not how we have to do it.....The parents don't want to talk their child up more than they feel they should...they've answered the questions but they've come in and indicated something quite different than how they had answered the question... (P1)

The participant appears to be acknowledging *herself* as the expert in knowing the child, seemingly dismissive of the value of parental input. This raises concerns around the validity of the screen when it has not been based around an elicited parent response but has been based on observational data from a practitioner. Research conducted by Williams (2006) emphasises the importance of health professionals in providing mothers with the opportunity of sharing their knowledge of their own children and that they can play a crucial role in identifying early developmental problems. Many of the participants admitted

to rephrasing questions on the PEDS form to varying degrees in order to clarify meaning for parents and caregivers.

The PEDS tool is not designed to be used as a stand-alone tool and where there are concerns raised about a child's development it is recommended in the B4SC Handbook for Practitioners (MOH, 2008, p.40) that a secondary screening assessment should be performed such as the Ages and Stages Questionnaire (ASQ) or the BRIGANCE⁵ screen. One of the significant findings of this study was that contrary to the recommendations by the MOH only the Public Health Nurse participants had received training in a secondary screen; this was always used by them prior to any referrals being made. The remaining participants did not instigate a secondary screen when concerns were detected; the child was usually referred on without this having been completed.

I think we should have had a further screening tool, like the Ages and Stages, if we did a PEDS and identified some issues, you'd need to know exactly what those issues were because parents would just say well he can't write this or he can't do that. Some parent's expectations of their children are quite high and some are quite low but I think we needed to be able to do another screening just to be sure sometimes... (P4)

If we picked up on the PEDS that there was an issue or we were concerned about something we were fortunate because we were trained to do a secondary screening questionnaire, the Ages and Stages and this is a much more robust way of being able to identify problems and then armed with that knowledge we could then refer on... (P5)

Carrying out a second stage screen for children where there is a significant area of concern helps to reduce the number of children referred for detailed assessment who do not

⁵ see www.brigance.com/

actually have a developmental delay or disability. Goldfield and Oberklaid (2007) suggest that a child who fails a second stage screen requires referral for assessment and in contrast a child who passes the second stage screen needs developmental support, careful follow-up and family education.

Even though the participants experienced minor difficulties administering the PEDS overall they were positive about it adding value to the check.

The PEDS tool if used in its entirety is a great tool to actually support the parent and gauge a child's readiness for school... (P6)

The PEDS which the parent completed on how they saw the development of their child was extremely useful as well as easy to useI think it helped the parent to see the different areas of development that were important for their child...(P7)

These opinions concur with research conducted in Australia by Armstrong and Goldfield (2008) who found that the majority of parents and practitioners found the PEDS tool both worthwhile and easy to use in the community setting. Their findings indicated that those parents who were least educated found the PEDS tool most helpful with 99.4% of parents finding the questionnaire easy or very easy to complete, however this was not necessarily noted by participants in this study.

4.1.3 Behavioural Assessment

Behavioural assessment in the B4SC is undertaken by using the Strength and Difficulties Questionnaire (SDQ). The SDQ is a brief behavioural screening questionnaire and has been designed to assess 3 to 16-year-olds. The parent form is referred to as the SDQP and the teacher form is referred to as the SDQT. The SDQ tool created much discussion by

the participants in this study namely around cultural appropriateness, parental expectations, engagement of early childhood centres, professional training and lack of follow-up resources for families. Professional training and available resources will be discussed later in Chapter 5.

The SDQ is widely used internationally and is available in 49 different languages with the exception of Mandarin, Samoan, Tongan, or Māori which are of particular relevance to New Zealand. This is significant in light of the 2006 Consensus which revealed that approximately 266,000 Pacific Islanders reside in New Zealand with two thirds of those based in Auckland. Participants in the study identified difficulties where English was a second language:

The SDQ was a bit of a challenge, there are some words there like fidgeting, that are particularly English and quite difficult to put into another culture's language... (P7)

Even some people who had reasonable English but it wasn't their first language would struggle with some of the concepts in the SDQ – 'fidgeting and squirming' – people just didn't know what that meant so you had to find another way of saying it and you know the word 'spiteful' – they didn't know what spiteful was, there was no word in their language to describe it... (P5)

One participant voiced the concern that even with an interpreter this problem was not easy to solve:

"Interpreters were usually English as a second language people and sometimes they needed help in understanding what the form was all about and of course you wouldn't always

pick up that was an issue unless they asked you because they were talking in another language...”(P5)

Some of the participants stated that they frequently resorted to changing the terminology and miming in order to explain what certain words or phrases meant:

Miming, yeah, trying to act it out and expanding it, which of course you are not supposed to do with the SDQ... (P1)

Where necessary I make an interpretation; fidgeting and squirming is easy because you just fidget and squirm in your chair....I do interpret the questions and more than just those two sometimes because the questions have got to be at a level that the parents understand...(P2).

There appeared to be a compulsion to achieve a completed SDQ whatever that entailed, whether or not this was linked to being able to ‘complete’ a check and therefore contribute to the achievement of Ministerial targets and thus receive funding is not clear - suggestive but not defined by the participants. Despite being aware that changing content of the SDQ could affect its validity this did not appear to alter this practice overall.

Cultural appropriateness of the SDQ was of particular concern to all the participants particularly in relation to the participant’s perceived differences in considered cultural norms:

I feel a lot of the questions are aimed at educated Pakeha to be honest, and I felt that there are cultural differences in families and the SDQ form doesn’t address those.....the ‘usually plays alone’ question for example, in a lot of Chinese families they are solo children and they do play alone and they are encouraged and considered to be extremely

good if they do play alone and don't demand a lot of attention whereas a child from a Pacific Island family is very much a part of a larger group, so the child playing alone would be identified as perhaps an issue...(P1)

The 'gets on better with adults than other children' question, again it's often seen by families as a better thing. Their child is more mature, their child is doing better..." (P2)

Parental expectations of their child as revealed through their response on the SDQ was another frequent topic raised in the individual interviews, a difference in what one parent would consider 'normal' and acceptable behaviour for their child compared to another parent with a similar age child. The participants agreed that this was an area which frequently required skilled navigation and discussion as often the parent child relationship played a part in the degree of scoring.

Sometimes it's the relationship that the mother has with the child which is the problem rather than the child themselves... (P2)

Two of the participants reflected on the observation that when both parents attended a check there was more often than not differences in how each would score the SDQ. This sometimes appeared to cause some tension as the parents would often disagree on one or more responses.

It was usually the mothers that attended the check although I did have some parents come together and they often had different views on how to answer the SDQ; it could cause quite heated discussion... (P7)

This appears to be a particularly relevant observation in the data as reports in the literature suggest that this is not uncommon. International studies have been conducted to explore

the phenomenon of parent-child relationships and the reporting of behaviours in more depth (Stacks & Oshio, 2009). There is also research available that looks specifically at inter-parental agreement on child behaviour reporting between mothers and fathers (Christensen, Sullaway & Margolin, 1992; Dave, Nazareth, Senior & Sherr, 2008; Treutler & Epkins, 2003). This will be discussed in more detail later on in this report.

The Strength and Difficulties Questionnaire Teacher (SDQT) is the teacher version of the Strengths and Difficulties questionnaire. It is a requirement of the B4SC that this form is completed by the child's preschool teacher. The rationale behind having both the parent and the teacher as a respondent is to provide a more comprehensive overview of the child's behaviour in the two different environments, home and preschool. The overall SDQ score is deemed to be more sensitive if both a parent and a teacher complete the questionnaire (Goodman et al., 2000. p.538). However, according to the participants in this study, obtaining a completed SDQT was not always easy to achieve. Participants in the study noted that a small proportion of the children who attended for a B4SC did not attend any form of early childhood education so therefore the SDQT was unable to be completed. Some of these children did attend parent run play centres but participants felt it was not appropriate to give an SDQT to another parent to complete.

The participants had also consistently found that not all early childhood centres were supportive of the SDQT and there were fears circulating around the 'labelling' of children.

Someone had got into the media something about these 4 year olds being 'psychologically tested' and there were certain groups of early childhood centres that would send the forms back to us and quite firmly state "Please don't send any more of these forms" because they are not partaking in the Before School Check because they don't agree with it... (P3)

The church related pre-schools don't do them and there is an Early Childhood education chain, I am not sure which one it is but they won't do them... (P2)

In stark contrast to this one participant did not routinely give early childhood centres an opportunity to complete an SDQT as she deemed it unnecessary if she felt the child was fine based on the parent response only. This may be a controversial finding given the observations of some participants that the degree of reporting of behaviours may well be affected by the relationship that the parent has with his or her child:

If a child is not borderline in any area I personally would agree with the parent's assessment, because after spending so much time with the child and parent you can also get a feel for whether that child has got a problem.....the teacher is not likely to disagree with the parent but I would go on my own gut feeling on the interaction between the parent and the child... (P2)

Unfortunately this signals a lack of understanding of the purpose of the SDQT and in its ability to add to the sensitivity of the behavioural screen. Research conducted by Goodman et al. (2000) concluded that the SDQ prediction works best when SDQ's have been completed by parents AND teachers and that information provided by them was roughly equal in predictive value. Other participants perceived that the SDQT was a very important and necessary part of their check and because of this they would go to some lengths to get it returned:

It was really useful to be in contact with the preschools and to get their input on the same tool and then be able to compare; that way you could really get an idea of what was going on with this child.....we rang every preschool and talked to the teachers and in that way

there were two benefits in that: one was for the child but the other thing was we actually developed a really good relationship with a lot of preschools over time... (P5)

I particularly like the strengths and difficulties questionnaire, it gets both the parents perspective and the childcare perspective, because if parents have got concerns over an issue and childcare also have got a concern then we know there must be issues, but if it's just a parent then we can look at maybe the parent needs more support... (P6)

Overall there was some inconsistency in how the SDQT was utilised with some participants acknowledging its value and others not.

4.1.4 Hearing and Vision

There was a great deal of discussion on the hearing and vision component of the Before School check by those interviewed. The debate was less around the need for a vision and hearing screen but more around whom actually did this and how it was managed.

Currently in central Auckland the Vision and Hearing testers hold the contract for conducting the Before School Check hearing and vision screen. They do approximately 65% of their screening at ages 4 – 5yrs. According to all the participants, children and their families attending a B4SC were almost always required to attend a separate hearing and vision screening appointment. This created obvious difficulties for some families and there were frequent non-attenders to these additional appointments which had its own implications for being able to complete a check and to be remunerated accordingly.

I felt sorry for the families having to attend another appointment for the Vision and Hearing test, one of the questions I often ask is why couldn't the nurse be trained to do the hearing and vision screening because on other parts of the country, say for example,

South Auckland, they actually have got nurses trained to do hearing and vision assessments and that would make the process much easier and more straightforward..

(P6)

Having one process would definitely be easier for the family instead of them having to come in for an hour for the Before School Check and then possibly have to go to a separate clinic appointment for the vision and hearing screening. I think that is just being really family unfriendly in some ways, and costly... (P7)

Research by Ames (2007) with groups of children's health care providers supports these views. Ames (2007) found that amongst other factors, parental time constraints and transportation were identified as significant barriers to accessing health care for their children. Similarly the New Zealand Health Strategy (MOH, 2000) clearly proposed that to improve uptake and access of services a "more co-ordinated and complimentary ways of working across the sector need to be established" (p. 27). The two participants quoted had explored the idea of becoming trained in vision and hearing testing and discussed the possibilities with their senior management. They were advised at the time that this decision could not be supported as it would decrease the workload of the Vision and Hearing team. The participants reported that they felt frustrated that there appeared to be no consideration of the inconvenience caused to the families and of the unnecessary fragmentation of service delivery.

4.2 Time

If there are issues arising you need more time...

All the participants interviewed made reference to the time taken to undertake the B4SC. The B4SC Handbook for Practitioners (MOH, 2008) recommends that the time needed to

complete the check is 45 – 60 minutes. Participants in the study largely disagreed with this, citing several barriers to achieving completion and the need for additional time to action referrals and/or follow up.

Some of these barriers included teachers returning the behavioural screening questionnaires (SDQT), completion of Vision and Hearing screening and working with families where English was their second language. As discussed earlier in this chapter pressure of time was also seen to have an effect on how screening measures were utilised and in the overall approach to the check by some. Funding allocation by the MOH did not allow for any more time and many participants voiced their frustrations and concerns about the issues of screening in this way.

It's the pressure that's put on to get it finished, the expectation that it can be all done in the time allowed so we can get our target...it's a bloody nuisance...(P2)

Because of the lack of time it does run the risk of becoming a box ticking exercise and for me that would be pointless... (P5)

The Practice Nurse participants shared how they found the check difficult to fit into their already busy schedule, often they were required to be involved in unscheduled, opportunistic work and the considerable time the B4SC check took, affected their ability to be available for this:

For me it was about managing the time, knowing that I had an hour for this and that I had people booked in afterwards. I was feeling really worked up about not doing this well and just wanting to get this finished but feeling that the mother and child would not have got a lot out of this...(P1)

For all of us in General Practice, we have such a wide scope of practice. Before School Checks is just one little part of what we do and it's really important to have that designated time for these 4 year olds, you know the whole purpose of the Before School check necessitates time to be spent on them... (P2)

Even for those nurses for whom the B4SC was their core business, having sufficient time was also a factor.

Each check was allocated an hour and they generally took an hour...but if the family came in with a major problem, you often had to skim over parts of the check to complete it in the time allowed - that was frustrating (P7)

It took us at least an hour to do the actual check and then at least another hour after that to complete documentation, write your notes up, doing referrals and follow-ups...its hugely time consuming compared to the other standardised well child checks.. (P3)

For these nurses' time appeared to be synonymous with quality. Almost all participants stated that they went to some effort to provide a quality check despite the pressure of time; in most cases they felt that they did achieve this but there was a consensus that the allowance for more time would have in some cases increased the quality of the check and in all cases decreased the stress levels of the practitioners undertaking it. In the first of two older but highly relevant reports of research, Williams (1998) reported that from the nurse's perspective insufficient time was perceived as the main reason for their inability to consistently provide quality nursing care to their patients. Irurita (1999) confirms this in her study but from the patient's point of view – patients articulated that the nurse having sufficient time to meet their needs was considered to be central to the provision of quality nursing care. Lack of time can directly affect the development of the nurse/patient

relationship this is highly relevant in the case of the B4SC. More often than not this will be the one and only interaction families will have with the assigned B4SC practitioner and building a good rapport together is pivotal if meaningful data is to be gathered in the check.

The issue of attaining Ministerial targets was raised again during discussions about time available to complete a B4SC; not being funded for the extra work in facilitating referrals and follow-up phone calls stirred up strong feelings within the study group.

We weren't funded at all for any follow-ups; you just had to find any extra time in your day to do that... (P7).

That was a big mistake on the Governments part; they should have thought it through and allowed for discretionary follow-up in some cases...to ensure time could be made available to do the right referrals... (P2)

Having the time to do a high quality and holistic B4SC was important to all the participants in this study regardless of the area in which they worked. The participants articulated clearly their concerns about attaching targets to provision of routine well child care and were aware of the role that this might play in influencing practitioner behaviour; not utilising the SDQT, not revisiting health history questions, not always using screening measures in the way that was intended, rushing the check and timeliness of referrals.

Conclusion

This chapter has focused on the nurse's experiences of delivering the B4SC in its current format, the more predictive aspects, the constraints of working with the screening questionnaires and of being time bound. Although from three differing areas of community practice, all the participants identified similar issues around content and utilisation. This

would suggest that reviewing the content of the check needs further consideration. As previously discussed in this study, there is little research available in the literature that is relevant to child health surveillance in primary care. Therefore, it is paramount that the structure and mode of delivery of the B4SC reflects available evidence based guidelines that target quality health screening of preschool children and their families.

The following chapter will focus on the aftermath, reflections on the unforeseen issues, the unpredictable - those that only came to light for nurses after having completed several B4SC. In depth discussion on the significance of all of these findings collectively will occur in Chapter 5.

Chapter 5

FINDINGS: ON REFLECTION

Introduction

In chapter four the data on two themes related to the actual process of delivering the Before School Check (B4SC) were presented and explored: “Construct Constraints” and “Time”. The participants described the experience of working with the different instruments of surveillance and of working within time constraints. The analysis continues in this chapter with the presentation of the data related to the unexpected experiences, those that could not have been pre-empted prior to a participant performing a B4SC for the first time. The additional three themes that emerged from the analysis are: “Translation and Culture”, “Child Interaction” and “Training Support and Referring On”.

5.1 Translation and Culture

It's designed for educated Western people I feel and it doesn't necessarily address things in a cultural way...

5.1.1 Translation

The availability of resources for families where English was a second language was a topic of concern for all the participants. Some utilised available resources well and some were aware of what was accessible to them but did not always choose to utilise this. Participants were particularly concerned that translations of the tools being used were not available in Samoan, Tongan, Māori and Mandarin yet these were amongst the most commonly represented languages in New Zealand (Statistics New Zealand, 2012). Acknowledgement

was made of the Before School Check information pamphlet being available in these languages but participants felt that it was an oversight not to have taken this further:

I know these forms are available in other languages but the ones that they are not available in I would say are the ones most needed and that would have to be the Pacific Island languages... (P1)

As revealed in the previous chapter, the participants had struggled with time constraints when working with families where English was a second language but interestingly, although some participants acknowledged the need for further resources to assist in translation for families they did not always actively pursue these. Financial cost and time factors were cited as explanations for not doing so. This implies that participants did not always find that using an interpreter contributed to lessening the time and effort spent completing a B4SC. Interpreters were available for use by all the participants but one participant felt that utilisation of this resource should be considered carefully:

I often don't get an interpreter because we're talking about an interpreter for an hour. If I'd been concerned about a child then yes, I would have endeavoured to make another appointment and got them back in with someone who would interpret... (P2)

When asked to clarify if this decision was based solely around cost the same participant responded:

Not only that, when you get an interpreter, you need to make sure the interpreter comes in and you have to make sure that the child comes in too...(PN2)

This participant appears to be considering cost as a barrier to providing interpreter services preferring to 'have a go' first but being prepared to ask the family to return if she had

concerns that required further exploration. This demonstrates a disregard for the impact on the family of being asked to attend another appointment and raises concerns in relation to clinical cultural awareness. Being culturally aware and competent centres on the ability to effectively communicate, build a rapport, be aware of cross cultural ethics and have the ability to work successfully with interpreters (Camplin-Welch, 2007).

For those participants who had chosen to work with interpreters there was unease around the interpreter's ability to conceptualise some of the questionnaires used in the B4SC and to accurately translate them.

If we needed an interpreter then that would be organised but sometimes they would arrive and struggle with understanding some of the concepts of the check and we would have to spend time explaining that to them.. (P6)

Interpreters were usually English as a second language people and sometimes they needed a little bit of help with understanding what the form was about... (P5)

These findings align with that of a study conducted by Gerrish, Chau, Sobowale and Birks (2004) who noted that the extent to which interpreters were used to assist with communication in primary care varied considerably across and within nursing groups. The study also revealed that financial considerations did influence the nurse's decision with some participants feeling under pressure from their management to keep costs down and only use an interpreter if absolutely necessary. Furthermore a systematic review by Flores (2005), exploring the impact of interpreter services on the quality of healthcare, confirms that inadequate interpreter services directly affects quality of care for patients who have limited English proficiency.

5.1.2 Cultural Appropriateness

Participants were apprehensive that the collective format of the check was not always culturally appropriate. Much of this centered on the language and terminology used in the questionnaires that were a challenge to translate without losing contextual meaning. However, participants were also concerned that amongst the children they were screening there was a diverse range of ethnicities represented and they queried whether or not the check took into account any difference in cultural norms if indeed there were any.

One of the doctors I work for is Chinese; she wants any problems with Chinese children discussed with her first because she said sometimes it's a cultural thing... (P2)

Some families from different cultures had different expectations around behaviour and development but not understanding what these really were I sometimes felt bad interpreting results from a Western perspective... (P5)

It would appear that participants in this study are right to question the differences in cultural norms in regards particularly to behavioural screening in children. Sharp & Skinner (2011), and Crijnen, Achenbach & Verhulst, (1999) have suggested that the use of Americanisms, interpretation issues, language problems, gender, expression of emotion, family structure, environment and cultural norms regarding psychiatric symptoms are all important to address prior to commencing screening on a diverse population using a Westernised tool. Bengi-Arslan, Verhulst, Van de Ende & Erol (1997) also suggest that there may be a correlation between anxiety levels in immigrant children compared to non-immigrant as reported by their parents but cautioned that this was not necessarily due to being an immigrant but may well be due to cultural differences in the perceptions and expectations of children's behaviours.

5.2 Child Interaction

There were cases where parents thought they didn't need to bring the child...

5.2.1 Involvement

Throughout all of the participant interviews concerns were raised that in its original format the B4SC did not allow for enough interaction with the child. The participants were in agreement that nursing observation was the most powerful tool of the check along with knowledge of development and behavioural norms. The participants observed that there was little in the original format to make the child feel that the check was about them.

Kept to its original format the check was something that you could have pretty much done with the parent alone other than weighing and measuring the child, we needed a way to involve the child more.... (P5)

There was also consensus in the findings that the participants felt compelled to find ways to engage with the child in order to more accurately assess age appropriate development and behaviour. Without exception new tools had been developed by the participants themselves or their employers that allowed for closer interaction and observation of the child:

The check didn't really involve the child apart from the height and weight and we felt that we really needed to see them, actually see their development. We needed to have the child interacting with us and not just rely on what the parent said... (P7)

I won't do a check without interacting with the child, spending time and working with the child actually gives you a chance to see what you think is going on as well as helping with the interpretation of those questions....(P2)

Here, the participants are challenging the structure of the check, noting that although the B4SC was about the child it seemingly did not involve the child adequately enough to assess school readiness. This demonstrates what nurse's consider central to their practice – the patient. The assessment of a well child is no different from a sick child and it would be considered very unusual to do a pre-operative assessment in a hospital setting without interacting with the child but instead rely on the parent stating that their child was ready for theatre. Participants in this study felt similarly, they wanted and needed to interact more with the child in order to accurately assess their readiness for school and identify any issues that could impact on this.

It's incredibly valuable to be able to see a child and in the hour that you had them see how they behaved. You'd have toys and they would play with them while you talked to the parent but all the time you would be observing them; how they played, how they put things together, how they used their hands and what they were actually interested in. We would then do things with them ourselves, drawing, asking them to name things in books, stuff like that - from that you could tell a lot about the child, what their concentration was like, their ability with their hands, interactions with siblings who often came along as well, you get a real feel for the child. It's not just about ticking boxes, it really is about observations that you make with your developmental knowledge as a nurse... (P5)

Children themselves have expectations of nurses; they expect them to interact with them, play games, talk to them, educate them and involve them in their care (Pelander & Leino-Kilpi, 2004; Randall, Brook & Stammers, 2008).

If I was just looking at the questionnaires, that's not really about them from their perspective and they've been all geared up for this very special day, they are coming to see their doctor's nurse and its going to be their special 4 year old check... (P1)

One participant commented that when parents rang to book in for a B4SC some would query whether they should bring their child to the appointment or not. This may have been due to the developmental and behavioural screening measures being based solely on parent reporting as these were often sent out prior to the appointment or perhaps that the whole process had simply not been explained clearly enough.

5.2.2 Relationship with Practitioner

Discussion around the advantages of knowing the child prior to undertaking the B4SC for example being the child's Well Child Provider and having administered other core contacts within the Well Child/ Tamariki Ora schedule, revealed the least consensus. The viewpoint of having a fresh perspective as an 'outsider' versus the knowing the child and their family were discussed and most participants could see advantages to both. The check was viewed by some as a 'standalone check' and that it was irrelevant as to who conducted this as long as they had the skills and knowledge required. Knowing the child and family often meant it was quicker to engage and to get to the core of any presenting issues or concerns quickly:

If you are meeting the child for the first time, you can see things, identify things that sometimes other professionals may have missed or were not concerned about... (P4)

"If you have had the same person doing all those checks, then the person would know the child really well and that might be useful, but then the other side of it is that sometimes it's nice to have an independent person coming in and having another look at the child and they may see things that the other person has missed or not picked up... (P5)

The determination of who was to be the B4SC provider through allocation of funding and contracts was also seen to create barriers for service access. For 'hard to reach' families with high social needs having a nurse who knew them, could visit them at home and was

therefore able to assess the child in the context of their environment was seen by to be preferable:

*As a well child provider I see many families that are high risk and when the child comes to 4 years old I have to tell the family "Look you've got to take the child to the GP for the Before School Check", for these very vulnerable and hard to reach families this is sometimes not possible and I think that is not a continuity of health services really...
(P6)*

This participant recognises that accessibility to health services can be an issue for families, often those who most need input for medical services face barriers to accessing the help they need. These barriers are frequently created through inflexible health policies, structure and funding. Poverty, transport, parental time constraints, lack of education and language skills and health literacy are the most commonly cited barriers by families. Provision of health care services in the home and in local communities has been shown to alleviate some of these as well as allowing continuity of care with the same well child provider (Ames, 2007).

5.2.3 Assessing school readiness

All participants aspired to perform a quality B4SC check, one which involved the child and parent, that was holistic in its approach and that they felt competent to do. They also wanted the check to have meaning and value given the time and effort put into administering it. When asked about their views on whether the check succeeded in its claim to adequately assess readiness for school the participants were tentative in their responses:

As far as school readiness goes I'm not sure that I should be the one making that assumption in terms of one hour spent one on one with that child because that child is not

necessarily going to have engaged with me the way they might have on another occasion...

(P1)

I think as an assessment of a four year old it was a fairly basic level assessment but it gave an idea of where their health was but I don't feel it was enough really. By looking at things like pencil grip, knowing colours, letters, numbers, shapes etc we were able to assist families more in giving extra input to their children, sort of preparing them more for school ; with the Ministry format those things weren't even covered but in fact they are crucial for starting school... (P7)

These participants appeared cautious in claiming that the B4SC even in its entirety was able to adequately assess the school readiness of a 4-year-old. The interviews were often dominated by discussions on the concept of 'school readiness'. The notion that health professionals were the provider of an assessment that determined readiness to learn – an educational concept rather than a health one, was challenging for some and they expressed a desire for a closer relationship with the educational sector to confirm the value of the check.

On the basis of these responses participants were also asked whether or not they would suggest any changes to the current format to the B4SC. As previously discussed they had all advocated for more practical opportunities to interact with the child and to be able to observe them actually doing tasks, but in addition to this some participants referred back to the concept of practising holistically again - they wanted to interact individually with the child but they also acknowledged the importance of assessing that child within the context of their family environment. Two participants felt that it would be useful to include a social/environmental screen:

It probably needs to be reviewed and yeah, it doesn't take in family dynamics as well and whether there's other problems that might impact on children's health like overcrowding, how many people are living in the house and who is actually filling in these forms....it needs to take in the social context because there may be dysfunction in the family too. Perhaps there needs to be some sort of family functioning tool... (P3)

It's not just about the child on their own but more the whole sort of environment they are in, it's putting the child in the family situation, the family environment for the child, this was not considered in the check...(P7)

Children are born into, grow and develop in families and during the preschool years a child's wellbeing is dependent on the family's ability to provide a safe, nurturing and stimulating environment (Maggi, Irwin, Siddiqi & Hertzman, 2010). Many difficulties experienced by families can be linked directly to poor outcomes for children therefore it is imperative that any Well Child Programme adopts a whole family approach not just child focused.

5.3 Training, Support and Referring On

You're really just trying to get your head around all of the issues...what's all this about? What do I need to do?

5.3.1 Training

The MOH (2008) recommends that the person undertaking the B4SC should be a "registered nurse with experience in child health" (p.4). At the start of each interview the participants were asked about their prior nursing experience and how much specific paediatric or child health education they had prior to becoming a provider of the B4SC.

Participants were also asked to comment on the training they received around delivering the check and their confidence levels following this.

The degree of specific paediatric training and experience varied amongst the participants from baseline knowledge to having undergone some or a lot of post graduate training. Length of B4SC training and the content of varied across the three groups of participants as did confidence in initial delivery. Not surprisingly those with a high degree of paediatric knowledge felt more confident to undertake a B4SC in the first instance although all the participants found the SDQ and PEDS tools a challenge to interpret initially:

You need some paediatric knowledge – definitely, having an understanding of the development, of normal wellness in a child and being able to form relationships with the parent and child very quickly - that all comes from experience... (P7)

The nurses working in general practice voiced concerns that as generalists they were not as well equipped to interpret and make recommendations when children were identified with behavioural or developmental concerns:

I feel we still have a lot of learning to do before I could ever say that I could provide the level of expertise at an assessment like this that I feel a Plunket Nurse can... (P1)

My feeling at the end of it was that I didn't do that well, I felt it was way beyond me... (P2)

All participants had received a maximum of one full day of training on administering the B4SC with some occasional follow-up updates offered subsequent to this. Some participants had been able to observe a B4SC being done prior to doing their first and had found this enormously beneficial. One participant, an experienced well child nurse, stated

that despite her expertise there were some aspects of the check that required a much more in depth knowledge base compared to other well child core contacts:

Once we started rolling out the Before School Checks it became pretty obvious that we had a deficit in our knowledge that was required to fully assess these children using the Before School Check paperwork... (P5)

This 'deficit' was notably around speech development and behavioural norms of 4–5 year olds. The desire for more in-depth knowledge around these areas grew out of the number of referrals needing to be made relating to this. Often the practitioners who did not have access to a secondary screening tool were often having their referrals returned to them because of insufficient information.

We were referring a lot to the Special Education Service and those referrals were bouncing back to us because they required more assessment that wasn't actually part of the Before School Check screening tools... (P3)

Because I've had a lot of experience with children I probably picked things up easier but for a nurse who hadn't I think it would be very difficult for them to identify any issues and the thing was we didn't have a secondary screening tool so there was no way you could identify or confirm exactly the problems... (P4)

This perceived knowledge shortfall appeared to make some of the participants feel under confident about their work, they did not necessarily want the responsibility of making a referral based on their own findings and preferred to have reassurance from peers or employers that it was the right thing to do. This was particularly noticeable in the practice nurse responses:

I feel I'm not quite experienced enough to make that choice and not trained enough – it's not my place to make it either...I don't want that responsibility... (P2)

If there were any concern whatsoever I wouldn't hesitate to go to talk to the GP about whether he agreed with my referral or not... (P1)

The challenge seemed to lie in the practitioner's depth of knowledge of child development and behaviour and how they used that to interpret the questionnaires and instigate ongoing referrals if required. Practitioners were cautious about not wanting to 'label' a child or cause parents unnecessary anxiety by over diagnosing behavioural or developmental issues and were apprehensive about formulating hasty conclusions and predictions about a child's readiness for school. It was clear from the data presented that some participants had found their initial training inadequate.

5.3.2 Referrals

Acceptance of referrals was a problem for many of the participants which was mainly due to a perceived lack of resources but they also cited difficulties in being able to work collaboratively in the interests of the child. Some health practitioners were unwilling to acknowledge, accept or action a referral from a nurse. Referrals for obese children were deemed as almost impossible to have accepted due to lack of services available.

From my experience there's been a deficit in where to send children particularly if they are excessively overweight... (P3)

Our only real pathway for the obese child was to the GP and hope that perhaps the GP or practice nurse would pick that family up and work with them... (P5)

Some participants also commented on the lack of speech language therapists and the tight referral criteria for access to them. Often the only option for families was to go privately in order to gain timely interventions for their child but costs were high and prohibitive for many.

Maternal stress was a commonly presenting issue, feelings of inadequacy as a parent, social isolation and a lack of parenting skills but again, finding appropriate support for these mothers had been very difficult for participants. This raised concerns once more about the ethical issues of screening where there was limited or no services to refer onto when issues were identified.

Mental health referrals were the most difficult as they had very strict criteria and there are not a huge amount of support services out there... (P7)

You're finding these things but if there's nowhere to manage that, that's kind of challenging to sit with... (P4)

There was a sense of frustration because you're finding these issues and then there are not a lot of places to refer them to... (P3)

Participants also spoke out about their frustrations in not being able to do direct referrals to Paediatricians and for some, the lack of support from General Practitioners (GPs):

The Paediatricians at the hospital would not accept a referral from a nurse so the process for me was to talk to the GP who had not done any of the assessment and get him to refer to the paediatrician. So it is another hoop to go through, more time wasted; it was frustrating... (P6)

Furthermore, when the non-practice nurses did refer to the GP requesting input or referral for a child and their family, they stated that they consistently received no feedback at all. The nurses felt let down by this and remained concerned for their clients, angered over the lack of accountability of the GP.

I don't get the feedback once I refer to the GP and from a nursing perspective that is very unsatisfactory...it's like I started a process but don't get to see the finish... (P6)

Referring to GP was more like referring to a sinking ship because you never got any feedback....in fact I have had feedback only once from a GP who was incensed that I had asked him to follow-up over an allergy "who did I think was going to pay for this?" he asked me... (P5)

I don't think the GP actually see themselves as people who have to respond to anyone, they see themselves as the key person for the client but they don't actually see that they have to respond at all...I have no idea if any of my recommendations for children were ever followed through – this makes me feel sad (P4)

Here the perception is that the GP is somewhat dismissive of the participants concerns, that they were not worthy of a response. By behaving in this way the participants felt under confident that recommendations had been followed through and remained concerned for the child and their family. This is not a new phenomenon amongst medical practitioners; Smith and Khutoane (2009) undertook a study to examine *why* doctors do not choose to answer or feedback on referral letters. The impression of futility played a significant role in the doctor's decision whether or not to answer a referral letter, the feeling that it would serve no purpose and the assumption in some cases that the referrer would not understand the diagnosis. The doctors who took part in the study also expressed irritation over

“unnecessary” referrals and would not reply on the basis of deeming the referrer “incompetent” for doing such a referral in the first place. Interestingly when asked all the doctors interviewed were in agreement that they should indeed reply to referral letters but felt no embarrassment about acknowledging that they did not.

On a more positive note the Practice Nurses interviewed for this study felt that they received good support from the GP for whom they worked and claimed that the GPs were supportive of nurses to making their own referrals to outside agencies.

5.3.3 Professional Support

Accessing professional and peer support around aspects of the check was not easy for some of the participants, in a busy GP practice it was not possible to have ready access to a support person as most GPs were busy with their own appointment schedules. Most of the participants knew where to get support from but again process, time and availability often acted as barriers.

At the monthly meetings nurses can have peer review there, they can take along a case to discuss but they need the parent's permission – there is a special protocol form that you have to use, it has to be signed by the parent which is not always easy or practical... (P2)

I think there is an occasional evening centered around Before School Checks and if you go to those it gives you an opportunity to talk about some of the cases but evenings are no good to me... (P1)

Plunket Nurses received support from their Clinical Educators but perceived this as not always satisfactory as they were very difficult to get hold of because they covered a large number of practitioners. Public Health Nurses saw themselves as the most fortunate in

regards to having support for the work that they did. The team had access to a specialty clinical nurse as well as a developmental paediatrician, fortnightly case review meetings were held to discuss complex cases and to decide on appropriate pathways for referral. Monthly multidisciplinary meetings were also held with representatives from key referral agencies such as the Special Education Service, child mental health services and a GP representative from a leading Primary Health Care Organisation. Having access to this level of support had enabled these nurses to make timely and appropriate referrals whilst simultaneously providing an invaluable learning experience. This is further supported in the Hawkes Bay evaluation report of child health outcomes related to the B4SC (Morris-Matthews et al., 2010, p.47).

All of the participants articulated that they wanted timely and accessible support, to actively be able to discuss and reflect on their practice in order to improve on the care and advice offered. Unfortunately the level of support offered varied greatly between the work environments.

Conclusion

This chapter has centred on the unexpected experiences of nurses delivering the B4SC, those experiences that had only come to light having completed one or more B4SC assessments. It is clear from the data presented in this chapter that the participants held a common desire to do a high quality B4SC and wanted to be given sufficient time, training and support to do so. Without this, a feeling of job dissatisfaction - not being able to do a quality assessment, doubt over the significance of the check and concern about client satisfaction pervaded. The findings in this chapter suggest that in order for the B4SC screen to be truly effective and meaningful, better interdisciplinary communication and collaboration of health practitioners should be fostered. In addition, practitioners ought to

be given sufficient support to ensure they are confident in the early identification of concerns and in making accurate and timely referrals. Chapter six will offer discussion of the findings and how they may influence the ongoing the development of the B4SC.

Chapter 6

DISCUSSION

The aim of this research was to explore through semi-structured interviewing, nurses experiences of delivering the Before School Check (B4SC). This chapter will discuss the findings as they relate to the research question and the literature presented. Limitations of the research will be discussed along with implications for further research.

Participants in the study have described their individual experiences of delivering the B4SC; their challenges, opinions and recommendations for future development. Without exception each participant saw value in providing a check of this nature prior to a child starting school for the first time. This study revealed the participants concerns primarily around the current structure and content of the check and its perceived inability to provide an opportunity for a more integrated, 'whole child' approach. To a lesser extent, but still of significance, was the lack of resources for ongoing care and the adequacy of training and support for practitioners raised in the interviews. These four factors: structure, 'whole child' approach, resources and training will be discussed in more detail in this chapter.

6.1 Structure

6.1.1 Screening

Working within the confines of a very structured check proved testing for the participants in this study. Completing all aspects of the check to a standard that they considered acceptable was at times difficult, primarily due to time constraints. Their shared experiences of administering the surveillance measures, the Child Health Questionnaire (CHQ),

Parental Evaluation of Developmental Status (PEDS) and Strength and Difficulties Questionnaire (SDQ), suggested that each presented them with its own unique challenge. As described in Chapter 4 the nurses described how they made subtle changes in order to achieve what they perceived was a more well- rounded, holistic check.

The interconnectedness of the resulting themes from this study illustrated in Chapter Four (Figure 1, p60) is interesting to consider in relation to the current format and content of the B4SC. Without one of these the other could not exist; a cause and effect relationship. The cause in this case is referred to as “construct constraints” - the content of the check and the way it is delivered. The resulting effects were issues around time, being able to interact with the child, access to sufficient training and support for practitioners and working with families from different cultures and/or where English was a second language. However, these identified themes had the potential to be a ‘cause’ in their own right as each directly had the ability to create an impact on the other. For example: inadequate training of a practitioner could directly alter the way in which they interacted with the child (observation, engagement and assessment), could also have an effect on the time they took to do a check and affected how they worked with families from different ethnic groups and with interpreters. Similarly, having inadequate time to do a B4SC could restrict the degree of child interaction, reduce accessibility to interpreter services and leave the nurse feeling that she was not able to use all her expertise to do a quality check or be able to do further assessments in order to refer on. This causal relationship was a unique finding of this study and if a review of the current format of the B4SC is undertaken in the future it will be important to address these themes collectively rather than in isolation.

In the context of the Well Child/ Tamariki Ora Framework the developmental screening tool, the Parental Evaluation of Developmental Status (PEDS), is intended to be used as a surveillance tool rather than a screening tool but given that the B4SC is not always

performed by the child's own Well Child Provider it is more commonly used as a screening tool in this instance. In the absence of information from previous Well Child checks some of the participants relied upon the parental responses and their assessment on the day of the check to determine that a child was consistently reaching their developmental milestones. Despite some concerns raised by the participants about this, some research has suggested that periodic screening using a standardised tool in addition to surveillance increases the likelihood of identifying children with developmental delays (Thomas, Cotton, Pan & Ratliff-Schaub, 2012).

The participants described initial difficulties in applying and interpreting the PEDS regardless of their prior experience despite the literature claiming that most health practitioners found the PEDS quick and easy to use (Armstrong & Goldfield, 2008; Glascoe, 2000; Koesnandar & Pustika, 2010). This implies that more training around the use of the PEDS assessment and in the utilisation of a secondary screen would have been beneficial.

The use of the Strength and Difficulties Questionnaire (SDQ) as a behavioural screen also presented some unique challenges for the participants in this study. This brief behavioural screen was reported to be easy to administer but the participants commented that the interpretation was less straight forward, particularly when assessing children from different cultures and where English was a second language. The participants readily identified that there appeared to be differences in the perceptions of the cultural norms of behaviour for children aged 4 years. These views are supported by Woerner, Fleitlich-Bilyk, Martinussen, Fletcher and Cucchario (2004) who, after conducting a review of a selection of projects that had evaluated the use of the SDQ in a range of non-European countries, recommended more international investigation be undertaken to examine cross-cultural differences and similarities in child behaviour. A study led by Marzocchi, Capron, Pietro,

Tauleria and Duyme (2004) further supports this after comparing differences in the reporting of child behaviours using the SDQ in five southern European countries. The study noted differences in reporting between the countries and recommended that further studies were conducted that explored child behaviour versus culture specific levels of adult informant's expectations and tolerance. Despite the differences in reporting of cultural norms through the SDQ there remains very positive evidence in the literature that the SDQ has good psychometric properties and is well received by clinicians due to its ease of use (Goodman et al., 2000; Marzocchi et al., 2004; Muris, Meesters & Van den Berg, 2003; Woerner et al., 2004), however the findings in this study were not entirely supportive of this.

A significant finding in this study was that the participants did not consistently seek or gain feedback from preschool teachers through the Strength and Difficulties Questionnaire Teacher response (SDQT), despite this being an integral requirement to fulfilling a behavioural screen in the B4SC. As suggested in Chapter Four and supported by the literature, the SDQ prediction works best when SDQs have been completed by all possible informants (Goodman et al., 2000), this being so, it is vital that the B4SC practitioner exercises caution in potentially 'labeling' children based on parental response alone. Findings from the literature and in this study suggest that additional exploration of the parent-child relationship and the psychosocial factors surrounding this are advisable in cases where only the parent has indicated significant behavioural concerns and where it is not possible to get additional feedback from a teacher informant using the SDQT (Goodman et al., 2000; Muris et al., 2003).

The need to improve access for families to Vision and Hearing screening was another significant finding in this study. Participants raised concerns at the acceptability of families attending two appointments in order to complete the B4SC and some questioned why they

could not be trained to do vision and hearing screening themselves. Two participants went so far as to explore this further but feedback from their employers had indicated that this was not an option at that time. Whether or not this was because it could potentially affect the workload of the established Vision and Hearing Testers (VHT) is unclear but what is clear was that the needs of the children and their families were not a priority in this regard. It is the researcher's view that allowing groups of professionals to work in silos is not conducive to providing effective, collaborative and comprehensive health care to families in the community.

The credibility of the B4SC in targeting the right assessment components for this age group is a topic that would warrant further discussion. Some of the current elements of the check do not appear to have a strong evidence base when compared to the literature. Contrary to what the participants in this study perceived, there appears to be insufficient evidence to advocate for or against many child health screening and surveillance activities that form part of numerous formal well child screening programmes. For example: enuresis (before 5 years of age), visual acuity screening, height and language delay. (Alexander & Mazza, 2010; Oberklaid, Wake, Harris, Hesketh & Wright, 2002). It is imperative therefore that the current screening components contained within the B4SC are evidence based and target the right risk factors for the intended age group.

6.1.2 Time

The perception of time being synonymous with being able to administer a quality check was referred to by all the participants in this study. Extra time was often needed at the actual check itself to complete all aspects particularly where English was a second language or significant concerns were disclosed. More time was often needed to explain the questions being asked in the questionnaires as parents may not have been familiar with the

terminology and therefore, it was more difficult to effectively elicit concerns. The time required post check was not funded yet was necessary in order to consult, make referrals and complete data entry. All the participants were required to 'find' the time to do this with their employers bearing the financial burden for this aspect of the check. One participant suggested that there should be a discretionary funding allowance for complex cases in order to ensure that there is time made available to facilitate appropriate interventions and referrals. Zuckerman, Stevens, Inkelas & Halfon (2004) acknowledge the importance of providing sufficient visit time in order to provide a better quality well child assessment and their research supports this study's findings in identifying that inadequate funding to allow for more time acted as a barrier for providers to cover all the recommended areas in the assessment. It is a commonly held view by those who implement programmes such as the B4SC that the higher the quality the higher the cost incurred, but in the bigger picture this is not actually true. If appropriate interventions and timely referrals are not put in place for children identified as having issues, than it is possible that the cost to society could be far greater when the child fails in the school system.

6.1.3 Funding

Participants in this study articulated frustrations around the effect that the funding structure had on practice in particular the pressures of being target driven in order to achieve reimbursement. Given these findings it is suggested that the application of the current funding structure of the B4SC requires careful consideration. Target driven payment incentives for the provision of well child care can unintentionally result in greater rewards to those providers who serve predominantly middle income families; those most motivated and able to attend appointments and have the potential to penalise those who care for low-income, 'hard to reach' children (Armour et al., 2001; Elkan & Robinson, 1998; Petersen et al., 2006). Engaging and accessing 'hard to reach' families is almost never

straightforward, often taking increased time and effort on the practitioners part. To some extent there has been an effort to address this with the B4SC currently being funded at a higher rate for children who live in quintile five (low socio-economic) areas. An increase in numbers of migrant and refugee families into all areas of Auckland coupled with the current levels of unemployment across all demographic groups means that there are many families for whom delivering well child services requires a much greater degree of effort on the behalf of practitioners. Ideally it could be more sensible to adjust payment for well child services to reflect the history of uptake of services in a particular population, regardless of quintile and certainly to assign funding to whichever well child provider delivers the care, not to have it ring fenced.

The last point can be further supported when one examines the success of the Hawkes's Bay B4SC programme in achieving a high uptake of B4SC participants. This has in part been due to the diversity of nurses who have been trained and employed to do the check, Practice Nurses, self- employed nurses working out of general medical practices and nurses employed by Māori health providers (Morris-Matthews et al., 2010).

Participants in this study also perceived that providing financial incentives purely for the numbers of children screened also had the potential to overlook the quality of care provided and evidence in the literature would appear to support this (Armour et al., 2001; Rosenthal, Fernandopulle, Song & Landon, 2004). As previously discussed, participants felt that the drawback of having targets was that they provided little incentive to direct resources to those children and their families who needed it most and that it was easy, in the quest for achieving targets, to reduce the quality of care given. It has been recognised that poor screening programme quality can tip the balance between doing more harm than good and in the National Health Committee Screening Programme Assessment Criteria

(2003) it clearly states that “once an invitation to be screened is issued, there is an ethical obligation to ensure that the programme can deliver the appropriate benefits through appropriate quality management” (p.9). That said, quality health care frequently means something different depending who you are: doctor, nurse, patient, manager, District Health Board or the MOH and because of this, defining what quality ‘looks like’ and expressing this in a quantifiable way is an ongoing challenge for our health system. Unfortunately, unless quality can be adequately measured in the delivery of a funded programme such as the B4SC, providers run the risk of losing sight of its original intent and may look on it as a “tick box” exercise, a perfunctory check with more focus on getting the job done and gathering the revenue than providing a comprehensive, meaningful check. This notion is supported by Petersen et al. (2006) who suggest that by applying standard remuneration for services to all providers there are no financial incentives for providing *quality* care. Furthermore, Elkan and Robinson (1998) warn that setting national targets may “serve to widen inequalities in health” (p.1515) and that “the achievement of some targets will not necessarily result in better health outcomes” (p.1515).

6.2 Attempting a ‘whole’ child focus using the B4SC

It is important to acknowledge that attending and ‘passing’ a B4SC screen cannot itself ensure school readiness, as there are many other factors aside from the child that can influence this as has already been discussed in this study. School readiness has traditionally been thought of as a simple outcome of a child’s developmental maturation, the mastery of certain tasks and skills that once achieved heralded ‘readiness’ (Kagan & Rigby, 2003; Meisels, 1999; Harris & Butterworth, 2002). The desire for a more holistic approach to assessment by all the participants was a key finding in this study; participants recognised the need to consider the child in the context of their environment and not independently

of it. The nurses had voiced frustrations and had felt constrained by the tools they had been given to work with, consequently they had gone out of their way to approach their checks in a more holistic way. This had been done by adding to or modifying the child health questionnaire, assisting parents in interpreting developmental and behavioural screening questions and insisting on a higher degree of interaction with the child.

It is important to consider what nurses actually mean by the term 'holism' in nursing practice and whether it is in fact possible to apply this concept to a well child health screen. Traditionally holism in health has been defined as "the treating of the whole person, taking into account mental and social factors rather than just the physical symptoms of a disease" (Holism, 2010). Holistic nursing draws on nursing knowledge, theories, expertise and intuition and is said to be mastered and developed through reflective practice (Hall, 2004; McEvoy & Duffy, 2008; Talen et al., 2007).

Difficulties can arise for nurses in their ability to provide holistic care when there is a lack of understanding of what this concept actually means and looks like from other interdisciplinary team members. This is also the case when a programme or project is set up in such a way as to limit the ability to provide a holistic approach. In the absence of an actual disease it is important to consider what the participants are suggesting in relation to holism and their approach to the B4SC assessment and school readiness. If school readiness or lack of is the 'disease' itself in this context, then the participants could consider school readiness within an 'ecological framework' as discussed in Chapter 2 in the review of the literature by Bronfenbrenner and Morris (1998). This 'ecological systems theory' is underpinned by the belief that school readiness is influenced by not only the individual themselves but also by their family, their community and societal factors. Participants in the study were concerned that children having the B4SC were being assessed in such a way that these factors were not able to be easily considered or measured. The perception that

the child's home environment, the way they were parented, cultural differences, exposure to early childhood education and accessibility to health services were key determinants in not only the school readiness of a child but for ongoing learning and attainment. This concurs with the considerable body of literature which discusses these wider concepts of school readiness (Bost et al., 1998; Kohen et al., 1998; Oliver et al., 2007; Stacks & Oshio, 2009).

The participants had argued that too often these aspects are not addressed until later in a child's school life when learning or behavioural issues may present themselves. By then a considerable amount more support and resources are required to help remedy the issues. Sadly, often the life course for such children becomes more and more difficult to change as differences in skills and abilities become entrenched. This broader concept of school readiness has also been expressed by Walsh (2005), using the "Ready Child Equation":

Ready families + Ready early childhood services + Ready communities + Ready schools = Ready children (p.12).

The B4SC is inherently a health based check and in its current format only addresses one aspect of this equation: 'Ready Children'. The B4SC Handbook for Practitioners (MOH, 2008) suggests that by performing a B4SC and addressing behavioural, developmental or other health concerns this alone will ensure that children start school able to participate to the best of their ability. This directly goes against the ecological, holistic view of school readiness and runs the risk of assessing the child independently of other known and well researched contributing factors to a child's school readiness. The handbook goes on to state that *"The B4 School Check is not solely a physical health check, but also considers the child's community and environment"* (p.3). The opinions shared by the participants of this study would suggest that there is no capacity to do this within the current structure of the B4SC.

Interestingly a statement within the B4SC Handbook for Practitioners (MOH, 2008) contradicts the current format of delivery in many parts of the country. It acknowledges that assessment is not a static process: “Effective assessment cannot be a one-off action, but is an ongoing process. The assessment process is the beginning of the therapeutic relationship with the child and family/whanau” (p.2)

However, through the data presented in this study it would appear that for many children the B4SC *is* a one off assessment performed by a provider who does not necessarily have any established relationship with the child and their family or any information around their previous health surveillance outcomes. In addition the B4SC provider would not necessarily be maintaining an ongoing relationship with the family after the check. An example of this was the well child nurse who was required to pass her client over to primary care services for a B4SC even though she had been working with the family from the child’s birth. No information was sought from her pre or post check. This situation has likely resulted due to the rigidity of funding allocation with little regard to the benefits of ongoing care provision to high need families or the accessibility and maintenance of the practitioner/patient relationship.

Interestingly it appears that the Ministry of Health’s original intent was that any health professional with the required competencies should not be precluded from providing the B4SC and they advised that new workforces should not be set up that competed with an existing work force with the same role (MOH, 2007). This study reveals this would appear not to be the case. It seems that with continued limited flexibility of providers, interagency collaboration or communication there is a risk of the B4SC becoming an isolated, static process; one that is less meaningful because it is not able to be considered within the context of the overall health surveillance conducted under the Well Child/ Tamariki Ora framework.

Participants in the study repeatedly referred to the importance of reviewing the child within the context of their family and environment but were frustrated that the content of the check did not give enough scope for this. It relied upon the nurse's intuition, interview and observation skills to see any cues that may imply there were psychosocial concerns within the family. The quality of family functioning has been shown to be associated with a lower risk of psychosocial maladjustment in children and adolescents, ensuring healthy outcomes for children should involve focusing on family needs as well as the child's individual needs (Hall, 2005; Roustit et al., 2011; Talen et al., 2007).

Often medical practitioners priorities do not coincide with that of their patients (Jung, Wensing & Grol, 1997), some may even go so far as to criticise families for failing to provide the recommended care for their children. It could be that the medical system inadvertently sets families up to fail from the outset by recommending types of interventions that are just not possible or sustainable due to certain psychosocial factors – financial constraints, overcrowding, partnership breakdown, parental sickness and so on. A health practitioner's priorities are not always matched to that of their patients and often it is assumed that they should – paying the last five dollars you have for the week for a prescription for one of your children or paying the same five dollars for two loaves of bread to feed of them. The choices our families face are often more challenging than some health practitioners truly appreciate. Money for a bus ride to attend a Before School Check only to realise you have to find another bus fare to attend a separate hearing and vision check is a prime example. We fail our families with scenarios such as this.

Little has been done to address the social and emotional difficulties that are increasingly prevalent amongst our children today with more and more being cared for in families with limited resources and resiliency. (Craig, McDonald, Reddington & Wicken, 2009) The findings of this study suggest that adopting a Family Centered Care approach (Bruce et al.,

2002; Committee on Hospital Centered Care & Institute for Patients and Family Centered Care, 2012) with the incorporation of some form of family functioning tool to screen for issues to do with family strengths, resiliency and required supports would be a worthwhile consideration for the further development of the B4SC.

6.3 Resources

Screening raises important ethical issues and it is imperative that programmes should always be based on quality evidence that shows they do more good than harm. (Centre for Community Child Health, 2002; National Health Committee, 2003). The possible advantages of early detection programmes such as the B4SC should be assessed in terms of availability of resources to provide effective interventions. The current content of the B4SC highlights this point; the use of two specific screening tools, the PEDS and SDQ is aimed at detecting concerns that if significant, may require input from a specialised services. Although accurately identified, these concerns are not deemed severe enough to fulfil an agency's referral criteria for such. Participants in this study voiced frustrations about the lack of resources that were available to refer families to and about receiving little feedback when actual referrals were made. The participants questioned the ethics of identifying concerns but having no resources available to help address them, they indicated that this often resulted in the 'band aiding' of the concerns with the potential of leaving the family worse off.

The delivery of screening programmes is often not equivalent to the delivery of services that address the issues identified from them (Holland et al., 2006). One of the recommended criteria for assessing screening programmes in New Zealand is that "the healthcare system will be capable of supporting all necessary elements of the screening pathway, including diagnosis, follow-up and programme evaluation" (National Health

Committee, 2003, p.3). Based on the findings of this study it is recommended that better planning be put in place before implementing screening programmes such as the B4SC to manage, monitor and evaluate their ongoing effectiveness. A screening programme should also be easily accessible to those most likely to benefit from it.

6.4 Training

The participants in this study described episodes where they lacked confidence in their knowledge base, particularly in regards to child development and in the depth of training that they had received in relation to the B4SC. This training had varied from half a day to one full day. Morris Matthews et al. (2010), in their evaluation of the B4SC programme in the Hawke's Bay region, recommended that a B4SC training programme "suited to the needs of the nurses in the region" (p.47) was implemented and upheld. The literature provides evidence that when nurses perceive that they have the necessary skills to do their job competently, they work more autonomously and experience greater job satisfaction. This is furthered by having access to good quality clinical supervision and the opportunity for case reflection (Hlahane et al., 2006; Magnusson et al., 2011; Massoudi, Wickberg & Hwang, 2007).

Currently in New Zealand there are conflicting views on what qualifications a nurse should have when working with well or sick children. The Royal New Zealand Plunket Society (n.d.) advocates for its nurses to have a Post Graduate Certificate in Primary Specialty Nursing: Well Child/Tamariki Ora strand, in order to deliver the programme, in General Practice and Public Health there is no such requirement or recommendation. In many parts of Europe nurses who provide care to children and young people are required to have a specific qualification in this specialty but in New Zealand this is not the case. The Nursing Council of New Zealand does not recognise paediatric nursing as a specific scope of

practice and overseas child health qualifications such as the UK Registered Sick Children's Nurse (RN8, RNC) and Registered Health Visitor (RHV) post graduate training are not currently recognised.⁶

Workforce issues were raised in the New Zealand Health Strategy (MOH, 2000) where it was noted that there needed to be increased, support, supervision and ongoing training opportunities for child health professionals. The need for an increase in numbers of trained Māori and Pacific Island workers in this area was also highlighted. The Primary Health Care Strategy in 2001 (MOH, 2001) acknowledged that “the ratio of practitioners to patients is not closely matched to population needs” (p.22) and cited that the number of Midwives had dropped and the numbers of Public Health Nurses and Well Child nurses remained static over the past decade despite an increased demand for maternal and child community health services. Workforce development was again supported in the Well Child/ Tamariki Ora Framework Review (MOH, 2007). The Ministry made a commitment to work with the sector to ensure that the well child workforce had the competencies needed to deliver the Well Child Programme and were supported with appropriate training. A promise was made to address issues of professional competency and leadership within the current Well Child/Tamariki Ora programme. Despite these recurrent promises over the past 12 years it seems there has been a distinct lack of momentum by the Ministry in this area, it is imperative that nurses who provide well child services in New Zealand are sufficiently supported to develop the expertise and skill to adequately and confidently do so.

⁶ See www.nmc-uk.org/registration

6.5 Limitations

There were three identified limitations of this study. The first was the sample size with a total of only seven nurses interviewed. Although representative of three different areas of community child health: two Plunket Nurses, two Practice Nurses and three Public Health Nurses, there was only minimal representation from each group. The small sample size albeit adequate does not claim to be representative of all nurses' experiences within these groups. However, the data gained was rich and unexpectedly consensual amongst all the participants which added to the generalisability of the findings.

Secondly, due to time constraints and the amount of rich data already gathered from the individual interviews the researcher decided to modify the proposed methodology and did not proceed with focus group interviewing. Unfortunately significant changes in the whole B4SC process throughout the course of this study had made it increasingly difficult to access nurses and arrange interviews with some of the participants reluctant to give up more time.

Thirdly, the study was limited to exploring the nurses' experiences of delivering the B4SC with no contribution from those who were on the receiving end. Those children and their families may well hold different concerns and issues around the current structure, delivery and content of the check.

6.6 Implications for further research

Further research into the relationship between parental psychosocial stressors and responses elicited from parents in the course of well child screening is required. Determining the degree to which parental stress influences how they report their child's

behaviours would add value to the further development of well child screening programmes in New Zealand.

In addition, further research is warranted on the perceived differences in the cultural norms of child behaviour and development specifically in New Zealand (NZ). Research into the appropriateness of the PEDS and SDQ screening tools for use with NZ families should focus on the cultural appropriateness of these tools and in the current training that is received by practitioners in relation to them. As a multicultural society it is imperative that health practitioners understand the subtleties of this so that more effective advice, support and interventions can be delivered when working with all families.

Conclusion

The findings of this study have suggested that a review of the current content and format of the B4SC is warranted. Further research has been suggested that might support any considerations to changing the current content and to give more focus on the acceptability of this check for all 4-year-olds living in New Zealand. In addition, a review of the service delivery in the Auckland Region to ensure that it does not inadvertently create barriers for access and ensures that collaborative relationships are fostered which in turn will support referral pathways and interventions for children.

There is no doubt that the participants in this study saw value in providing a well child check of this nature and were keen to provide a meaningful and high quality intervention. However, if this is to be consistently achieved then adequate training and continued support must be provided to those who administer the check; a consistent standard set nationally and all providers should regularly audit for quality and effectiveness. More collaboration with the education sector would no doubt enhance the usefulness of the

check and contribute to an ecological approach to school readiness – “ready schools” and “ready communities” (Rhode Island KIDS COUNT, 2005, p.12) an approach which if embraced can only have positive outcomes for all concerned.

Chapter Seven will highlight the recommendations arising from this study and provide a conclusion.

Chapter 7

WHERE TO FROM HERE?

Introduction

The aim of this qualitative study was to explore nurses' experiences of the implementation of the B4SC. The study focused on the experiences of a selection of nurses who work in the Auckland region using semi-structured interviews. This technique gave participants the opportunity to comment on all aspects of the check, as well as any issues that they may have experienced. The findings were surprisingly consistent and consensual across the interviewees, which added to the validity of the data collected. The participants identified some of the issues that faced them when administering a B4SC, highlighting areas of difficulty and, in some cases, offered possible solutions for these.

To date, research on the B4SC in New Zealand has centred on the Hawke's Bay where the programme was initially piloted and subsequently permanently implemented. I was unable to find any evidence of studies conducted outside the Hawke's Bay region and hope that this Auckland-based study will address this gap. This study has also contributed to the limited body of knowledge about nurse's experiences of their roles in delivering well child screening programmes in general.

7.1 Summary of study

I used Thomas's (2006) general inductive approach to thematic analysis to capture the individual experiences of seven community based nurses who have administered the B4SC in the Auckland region. My findings reflect the difficulties of delivering a very structured and prescriptive well child check. The issues identified by the participants can be separated according to their experiences of actually *doing* the check and their reflections *post* check. Considering these experiences collectively has enabled clear recommendations to be formulated to assist in the ongoing development of the B4SC.

The nurses perceived that performing a well child check in a very structured way, using specific questionnaires and being time bound, challenged their ability to provide a truly holistic approach to the check. They recognised that the child should always be considered in the context of their family and environment and therefore family stressors, parenting and societal influences should not be excluded from consideration. The perception was that the format of the B4SC did not allow for a valid assessment of the wider picture.

The challenges of administering the B4SC to children and parents from different cultures, and where English was a second language, raised a few concerns. The nurses identified that there was often a difference in reporting between cultures in relation to what was deemed normal, age appropriate behaviour and development. Some participants expressed reluctance to impose westernised standards of behaviour and development to score children using westernised tools of assessment. The nurses' concerns are validated by studies showing cultural differences in parental expectations of both the development and behaviour of their children (Bengi-Arslan et al., 1997; Lemos, 2008; Marzoochi et al., 2004; Woerner et al., 2004).

The participants also highlighted the need for more translations of resources, particularly the Parental Evaluation of Developmental Status (PEDS) and Strength and Difficulties Questionnaire (SDQ) measures. Samoan, Tongan and Mandarin translations of the questionnaires were seen as most necessary, and a sensible and logical development given the prevalence of groups speaking these languages in New Zealand.

Adequate training, ongoing support and education for nurses who deliver the B4SC were recognised by the participants as priorities. Central to this was having sufficient knowledge of child development and behaviour and being able to apply this to the interpretation of the completed B4SC questionnaires. B4SC training programmes offered to the participants had varied in length and depth, some receiving half a day and others a full day. Not all the participants were offered any ongoing support or education and if they were, it was often offered out of work hours or away from their place of work which made it difficult to access.

When identifying concerns related to the B4SC questionnaires, the nurses wanted assurance that they would not potentially leave families worse off by identifying issues that were not able to be addressed further due to limited or no services available to refer on to. The ethical issues of screening in this way were identified as a dilemma by some. Interagency collaboration to support referrals by those who administer the B4SC is paramount if successful outcomes are to be realised.

Many of the participants had not experienced delivering a well child assessment in the context of a specific target driven, 'fee for service' activity (i.e. remuneration per check performed). Those who were providers of other well child, core contact checks under the Well Child/Tamariki Ora National Schedule (WCTO) (MOH, 2002) expressed concern about working in this way and the associated risks of reducing access for those who needed

it most. The nurses also felt that being required to achieve target numbers in order to receive full funding could work to diminish the quality and meaningfulness of the check.

Despite the issues raised by participants, overall their feedback on the usefulness of the check was positive. All the participants recognised the value in offering a check of this nature prior to a child starting school and actively promoted families' engagement with it.

7.2 Recommendations for the further development of the B4SC

The recommendations are introduced under three broad areas: content, nursing practice and funding. Within these areas specific topics will be commented on.

Content

It is evident from the findings of this study that a review of the current content of the B4SC is warranted:

- 1. Translation:** An increased effort could be made to provide translations of the PEDS and SDQ questionnaires in languages most commonly spoken in New Zealand.
- 2. Evidence Based:** A reappraisal of the contents of the B4SC in consultation with not only the medical profession but also representatives from the education sector would ensure the B4SC is targeting the right risk factors for assessing school readiness.
- 3. A 'Whole' Child Approach:** A Family Centred Care (Bruce et al., 2002) approach could be considered in order to provide a more holistic approach to assessment for all well child screening and surveillance programmes. Although primarily a paediatric inpatient based model, Bruce et al.'s (2002) principles would transfer easily to the

WCTO framework. In relation to this, inclusion of a self-report family strengths scale could be included.

- 4. Child Interaction:** Evidence based and standardised activities that involve the child more and positively contribute to the B4SC assessment process could be developed by the Ministry of Health.

Nursing Practice

- 5. Investment in Quality:** In order to deliver high quality, effective and efficient service nurses delivering the B4SC need to be adequately trained and supported to do so. A standardised training schedule for nurses could be made mandatory for all regions by the Ministry of Health and records of attendance kept at DHB level. In addition, the use of a nationally recognised self-audit tool by nurses delivering the B4SC in all regions could become a requirement.
- 6. Hearing and Vision:** District Health Board's could consider training nurses who deliver the B4SC to perform hearing and vision screening for this age group. This will not only improve uptake by families as they will not have to attend two appointments but will increase the number of B4SC screenings completed and thus the achievement of set targets.

Policy

- 7. Funding:** As the eighth well child core contact in the WCTO National Schedule (MOH, 2002) the Ministry of Health should enable the B4SC to sit alongside its fellow

well child core contacts and be considered under the same service specification, not funded separately based on outputs achieved.

- 8. Improve access:** All District Health Boards across the country should consider utilising the roles of existing well child nurses in the provision of the B4SC to prevent unnecessary fragmentation and duplication of services. The check should be able to be administered by any nurse who has undergone the appropriate training to do so.

Conclusion

The B4SC provides a unique opportunity to engage with families and to offer assistance with a smooth transition of their children to the school environment. Health and learning are inextricably linked and this study has highlighted the need to work collaboratively across disciplines to support children in achieving their social and academic potential. The B4SC plays a small but very significant role in this for preschool children in New Zealand. For it to be truly successful however, we need to be mindful of how it is positioned in our health care system, its mode of funding, delivery and evidence base to ensure that it is serving those who most need it. Any proposed changes should involve those who deliver the check, as well as those who are likely to benefit from it.

The recommendations of this study have been borne out of the nurses' experiences and perceptions of delivering the B4SC. By sharing these experiences I hope that the future development of the check will be better informed.

"If you get health, then you have opportunity for literacy. Health first, then literacy." Bill Gates

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Participant Information Sheet

Implementation of the Before School Check: An Exploration of Nurse's Experiences.

Principal Investigator: Sarah Williams
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Associate Professor and Director of Nursing
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Introduction

You are invited to take part in a research study about the implementation of the Before School Check assessment.

My name is Sarah Williams; I am a Registered Nurse and the principal investigator for this study. This research study is for my thesis as part of a Master of Philosophy (Nursing). My current role is Public Health Nurse for the Community Child Health and Disability Service, Auckland District Health Board (ADHB).

I would appreciate it if you would take the time to consider participating in this study commencing in March 2012

Participation

You have been approached for this study because you are a registered nurse who currently performs or has performed the Before School Check on 4yr olds in the community. A total of eight to ten nurses in total will be recruited for this study in order to provide a range of opinions and views.

Please remember your participation is entirely voluntary. If you do agree to take part, you are free to withdraw from the study at any time, without having to give a reason. During the interview process you may stop the interview at any time and you do not have to answer all of the questions if you choose not to. You do not need to provide a reason for stopping the interview or choosing not to answer a question(s).

About the Study

This study aims to explore the implementation of the Before School Check from a nurse's perspective. Opinions and views by nurses of the current content and process used for the assessment will be gathered as part of the data for the research.

I will be undertaking this study from March 2012 to January 2013. It is anticipated that interviews will commence in June 2012.

What happens during the study?

You will be involved in a one on one interview which will take approximately 60-90 minutes. These interviews will occur at a time and place mutually agreed upon. When all the individual interviews have been conducted you will be asked to take part in a focus group interview, this is where a group of participants come together to discuss common themes that have arisen in the individual interviews.

The initial interview will be audio taped and then transcribed by a typist who will have signed a confidentiality agreement. You may at any time ask for the tape recorder to be turned off during the interview. All identifying information will be removed from the transcripts and these transcripts will only be seen by me and my research supervisor. You will then be asked to review your narrative that I have developed from your transcript, at that time you will have the opportunity to add, delete or amend your narrative if necessary.

Benefits, Risks & Safety

There are no identified risks or safety concerns associated with this study.

There are no direct benefits to you however it is anticipated that this study will inform the further development of the Before School Check education, delivery and assessment process.

General Information

This research is being undertaken as part of a Thesis for a Master of Philosophy. The study will be formally written up and the thesis will be available through the Massey University library. You can request a summary of this document if you wish. Findings will be disseminated through professional journals and conference/seminar presentations.

If you have any queries or concerns regarding your rights as a participant in this study, you may wish to contact your professional organisation or an independent health and disability advocate:

Free phone: 0800 555 050

Free fax: 0800 2 SUPPORT (0800 2787 7678)

Email: advocacy@hdc.org.nz

Confidentiality

No material which could personally identify you will be used in any reports on this study. Participant transcripts will be identified by a unique number and will be stored in a locked

cabinet. Lists of participant names and numbers will be stored in a separate locked cabinet. All computer files will be password protected and consent forms stored at the Principal Investigators private residence. The audiotapes of the interview and other study data will be destroyed at the conclusion of the study by the Principal Investigator.

Results

If you wish to view the results of the study, this will be provided on request to the Principal Investigator. It is anticipated that these results will be available by March 2012.

Statement of Approval

This study has received ethical approval from the Northern X Regional Ethics Committee Ethics reference number: NTX/11/EXP/006.

Participants Rights

You are under no obligation to accept this invitation. If you do decide to participate, you have the right to:

- Decline to answer any particular question;
- Withdraw from the study;
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that your name will not be used unless you give permission to the researcher;
- To be given access to a summary of findings when it is concluded

Please feel free to contact me if you have any questions or require further information about this study. Please use the contact details at the top of this information sheet.

Should you decide to participate please contact me by telephone or e-mail.

sarahwilliams@xtra.co.nz

Mob: 021 158 7397

Thank you for making the time to read about and consider taking part in this study.

Implementation of the Before School Check: An exploration of nurse's experiences.

PARTICIPANT CONSENT FORM - INDIVIDUAL

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree/do not agree to the interview being sound recorded. *(if applicable include this statement)*

I wish/do not wish to have my recordings returned to me. *(if applicable include this statement)*

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature:

Date:

Full Name - printed

Transcriber Confidentiality Agreement

Title of study: Implementation of The Before School Check: An exploration of nurse's experiences.

Principal Investigator: Sarah Williams

Contact phone number: 021 158 7387

I as the transcriber for the research study named above agree to transcribe the audiotapes in a confidential manner.

I agree that I will only discuss the information within the audiotapes and the transcriptions with the Principal Investigator as named above.

I agree that all of the information, both audio taped and written will be returned to the Principal Investigator and that no copies will be made of any of the audiotapes or transcripts.

I agree that no other person will have access to the audiotapes or transcripts while they are in my property for the purpose of transcription.

Signature of Transcriber: _____

Printed name of Transcriber: _____

Date: _____

Implementation of the Before School Check: An exploration of nurse's experiences.

AUTHORITY FOR THE RELEASE OF TRANSCRIPTS

I confirm that I have had the opportunity to read and amend the transcript of the interview(s) conducted with me.

I agree that the edited transcript and extracts from this may be used in reports and publications arising from the research.

Signature:

Date:

.....

Full Name - printed

.....

**Implementation of the Before School Check:
An exploration of nurse's experiences.**

Interview Guide.

As you are aware, my research study is about the delivery and assessment process of the Before School Check in its current format. I am interested in your experiences in delivering the check and your views on the assessment tools and content.

- What is your current role?
- Prior to your commencement of delivering the Before School Check what experience in child development and behaviour did you have?
- Tell me about the tools currently utilised in the Before School Check assessment.
- How confident do you feel in using these tools?
- Can you think of any specific changes that you would make to the assessment and why?
- Overall how would you rate the current assessment content of the Before School Check in judging school readiness of 4 yr olds?

Mailing Address:
Private Bag 92 522
Wellesley Street
Auckland 1141

email address
northernx_ethicscommittee@
moh.govt.nz

Ms Sarah Williams
51 Malvern Road
Mt Albert
Auckland 1022

Dear Sarah

Re: Ethics ref: **NTX/11/EXP/006** (please quote in all correspondence)
Study title: Implementation of The Before School Check: An exploration of nurse's experiences
Investigators: Ms Sarah Williams

Thank you for your application received 18 January 2011. The above study has been given ethical approval by the Chairperson of the **Northern X Regional Ethics Committee** under delegated authority.

Approved Documents

- Protocol number [undated, received 18/1/11]
- Information Sheet/Consent Form - **please insert footer with version number and date (eg. version 1, dated 21/1/11) and amend NTX Ethics Committee** (page 3 of information sheet) to Northern X Regional Ethics Committee. Please send us an updated copy
- Interview Guide [undated, received 18/1/11]
- Authority for Release of Transcripts [undated, received 18/1/11]
- Transcriber Confidentiality Agreement [undated, received 18/1/11]

v. Sent 28/1/2011

This approval is valid until 31 March 2012, provided that Annual Progress Reports are submitted (see below).

Amendments and Protocol Deviations

All significant amendments to this proposal must receive prior approval from the Committee. Significant amendments include (but are not limited to) changes to:

- the researcher responsible for the conduct of the study at a study site
- the addition of an extra study site
- the design or duration of the study
- the method of recruitment

Significant deviations from the approved protocol must be reported to the Committee as soon as possible.

Annual Progress Reports and Final Reports

The first Annual Progress Report for this study is due to the Committee by **21 January 2012**. The Annual Report Form that should be used is available at www.ethicscommittees.health.govt.nz. Please note that if you do not provide a progress report by this date, ethical approval may be withdrawn.

A Final Report is also required at the conclusion of the study. The Final Report Form is also available at www.ethicscommittees.health.govt.nz.

We wish you all the best with your study.

Yours sincerely



Cheh Chua(Ms)
Assistant Administrator
Northern X Regional Ethics Committee

21 March 2012

Ms Sarah Williams
51 Malvern Road
Mt Albert
Auckland 1022

Dear Sarah

Re: Ethics ref: **NTX/11/EXP/006** (please quote in all correspondence)
Study title: Implementation of The Before School Check: An exploration of nurse's experiences; PIS/Cons V#, 02/12
Investigators: Ms Sarah Williams (Principal), A/Prof Annette Huntington (Supervisor)

Thank you for your progress report received on 19 March 2012 with the Information Sheet (version dated February 2012)

The study has received ongoing ethical approval for the next twelve months from the Deputy Chairperson of Northern X Regional Ethics Committee under delegated authority. The next progress report is due **21 March 2013**. If the study is completed before the due date, please submit a final report.

It should be noted that Ethics Committee ethical approval does not imply any resource commitment or administrative facilitation by any healthcare provider, within whose facility the research is to be carried out. Where applicable, authority for this must be obtained separately from the appropriate manager within the organisation.

Please note that progress reports are the responsibility of the researcher and forms can be found on the website, www.ethicscommittees.health.govt.nz. Please complete promptly to ensure ethical approval is continued.

It would be appreciated if we were advised when the study is completed and also that an End of Study Report is sent promptly after completion in order to close and archive the file.

Yours sincerely,



Cheh Chua (Ms)
Administrator
Northern X Regional Ethics Committee