COMMUNICATING HEALTH INFORMATION TO PACIFIC WOMEN

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ABSTRACT

The ability to acquire and use information is an essential component in the process of obtaining knowledge. It is an interesting phenomenon that people do not always access information that is beneficial for them (Chatman, 1991). As New Zealand becomes increasingly multicultural the need to communicate health messages in a culturally appropriate and effective way is expanding in importance.

This study examined the nature of current methods used by Pacific women to access cervical screening information. It also explored the barriers to obtaining that information and how the participants believed communication about cervical screening should take place to reach Pacific women in a culturally appropriate way. Results are analysed in the light of the knowledge gap hypothesis. This hypothesis places emphasis on socioeconomic factors as being predictors of knowledge.

Twenty Pacific women living in Palmerston North were selected for the study using the snowball sampling technique. The participants varied in age from 20 to over 50 years and their education ranged from primary to tertiary level. The third key variable was length of time in New Zealand. This ranged from three months to 33 years. Semi-structured indepth interviews of approximately two hours duration were completed. These were recorded and transcribed with the permission of the participants. Transcripts were analysed using the technique of content analysis.

The study found that knowledge gaps were related to the "subject matter". The topic of cervical screening was perceived to be very sensitive because of the taboo nature of discussing topics related to sex and the sexual organs. Sensitivity appeared to be related to age and length of time in New Zealand but not to education. Socioeconomic factors did not appear to be closely linked to levels of understanding by Pacific women about cervical screening. Interest in the topic and the motivation to acquire information were more indicative of knowledge gaps.

Three key barriers to successful communication were identified: cultural background, lack of confidentiality and embarrassment. Of these, cultural background was perceived by the participants to have the most significant influence on their ability to access information. Face-to-face communication was the preferred method for obtaining both health information and cervical screening information. Print, radio or visual media communications were not considered effective due to the sensitivity of the subject and the indirect nature of the media. Written communication was advocated by the participants to supplement face-to-face communication when initially finding out about cervical screening.

The study suggested that holding face-to-face meetings with a health professional present, was the most effective way of reaching Pacific women. The lack of research in the area of communicating with Pacific women about health information places greater emphasis on the importance of the findings of this study. It also highlights the need to develop a subsequent body of research to ensure communication is effective, appropriate and not misdirected.

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CHAPTER ONE: INTRODUCTION

Purpose and Context of the Research

Communication between organisations and their publics frequently relies on written forms of communication (Cutlip, Center & Broom, 1994; Goldhaber, Dennis, Richetto & Wiio, 1979; Pearce, Figgins & Golen, 1984). This reliance on written communication makes the assumption that it is the preferred form of communication for the audience, that people can understand the written message and that the message was presented in a culturally appropriate way. New Zealand is becoming an increasingly multicultural country with a particularly large influx of people from the Pacific. Many Pacific people originally came to New Zealand in the early 1970s (Chong & Thomas, 1996). Since this time there has been a steady movement of people between the Pacific and New Zealand. English is often not the first language for these people and many also have an oral rather than a written culture. This can be a significant barrier when trying to understand official documents written in complex English.

The effectiveness of communicating health information to people of another culture is dependent on the way the message is conveyed. The message's relevance, acceptability and its presentation in an understandable way are important factors in delivering the message (Hubley, 1993). Communicating health messages in an acceptable and effective way is growing in importance as New Zealand becomes a multicultural country and deals with diseases such as cervical cancer which have cultural as well as health implications.

Cervical cancer is the second most common cancer in women after breast cancer (Adams, 1991). In New Zealand, approximately 100 women each year die from cervical cancer (Ministry of Women's Affairs, 1989). Although women over 45 years are more likely to be diagnosed with cervical cancer, the rate is increasing in women under 45 years (Federation of Women's Health Councils, 1992). The incidence and mortality

rate is far higher in non-European women (Ministry of Health, 1996), and research suggests that the rate of cervical cancer is far higher in Pacific women (Cox 1989; Cox & Skegg, 1989).

Research has indicated that the incidence and mortality from cervical cancer can be significantly reduced if women have access to regular screening services. Screening is used to detect any abnormal cells in the cervix at the pre-invasive phases, where they can be treated and a 100 percent cure rate is possible (Adams, 1991; Federation of Women's Health Councils, 1992).

Pacific women are considered to be a priority group in the National Cervical Screening Programme Policy (Ministry of Health, 1996). Language barriers, lack of knowledge about services and cultural values are recognised as being some of the restrictions which prevent Pacific women joining the Cervical Screening Programme (Ministry of Health, 1996). Although there is significant diversity between the Pacific Island cultures and it is important to recognise each culture as being unique, nevertheless, it is considered valid to look at them as a group (Ministry of Health 1996, Public Health Commission, 1994).

The purpose of the present study is to examine the nature of current communication methods used by Pacific women about the importance of having a cervical smear and to assess how this can be improved. The study examines the communication methods of Pacific women in Palmerston North, a provincial city of approximately 70,000 people.

This is fundamentally an exploratory qualitative study which aims to gain an understanding of Pacific women's perspectives of the nature of current communication and how they believe communication about cervical screening should take place to reach to women in culturally appropriate ways.

The knowledge gap hypothesis is used as the theoretical basis for the present study. This hypothesis places emphasis on socioeconomic status (SES) factors as being predictors of knowledge. The original hypothesis was based on the assumption that people with low SES factors are considered to have lower levels of knowledge compared

to people with high SES because of their ability to access information (Tichenor, Donohue & Olien, 1970). Recent knowledge gap research has used the hypothesis as a way of examining the differences in the ways in which low SES and high SES people search for, use and share information (Chatman & Pendleton, 1995).

In the present study, the knowledge gap hypothesis is being tested to find out if SES factors can be used as indicators for the participants' knowledge levels about cervical screening. Based on the assumptions of the knowledge gap hypothesis, the present study would expect to find that women with lower educational levels would have a correspondingly lower level of knowledge about cervical screening. It would also be assumed that variables such as age and length of time in New Zealand would not greatly impact on knowledge about cervical screening.

Research Objectives:

- To assess the current level of understanding about cervical screening
- To identify the barriers to understanding and acceptance of cervical screening promotion and assess if this is related to the knowledge gap hypothesis
- To explore the relationship between levels of understanding and demographic factors and to examine this possible link from a knowledge gap hypothesis perspective
- To identify the methods Pacific women use to obtain information
- To identify how communication with Pacific women could be improved.

Structure of the Thesis

This study is structured into six chapters. Chapter One provides a general overview of the topic and outlines the objectives of the research. Chapter Two discusses and critiques the literature relating to communicating with Pacific women about cervical screening. It examines four areas of research: the knowledge gap hypothesis and its use as a framework for the present study, cross-cultural communication, reaching audiences from a public relations perspective and, finally, concepts of health and

cervical screening and promotion. Chapter Three outlines the research design and research processes. It describes the relevance of the snowball sampling technique for such a sensitive topic and the procedure for selecting participants using this technique.

Chapter Four presents the results from 20 interviews with Pacific women. Trends regarding age, education and length of time in New Zealand are explored. This chapter uses the interview questions (outlined in Appendix 4) as a general structure for the chapter. Chapter Five provides the reader with an integration of the results and the relevant literature. The participants' knowledge of cervical screening is examined with reference to the knowledge gap hypothesis and other knowledge gap research. The next chapter then looks at the key barriers perceived by the women interviewed to accessing information and to having a smear. The communication channels used by the women and their preference for receiving information are discussed. Finally, the cross-cultural implications and the suggested approaches by the women interviewed for reaching Pacific women are examined.

Chapter Six concludes the thesis. The limitations of the present study together with directions for future research are identified.

CHAPTER TWO: LITERATURE REVIEW

Introduction

The present study looks at the nature of current communication with Pacific women about cervical screening. It seeks to identify the level of current understanding about cervical screening and how that information was gained. The study also examines the barriers to obtaining that information and how the partcipants' feel communication should take place to reach Pacific women in a culturally appropriate way.

This literature review will examine four areas of research. Firstly, it will outline the knowledge gap hypothesis and its use as a framework for exploring communication about cervical screening with Pacific women. Secondly, the cross-cultural communication body of research will be briefly examined with a particular emphasis placed on the need for people to have a shared understanding to achieve effective communication. The third section will explore methods of reaching cross-cultural audiences from the public relations perspective. The final section will be devoted to examining concepts of health and cervical cancer research and promotion and their relevance to Pacific women in New Zealand.

1. The Knowledge Gap Hypothesis

In the modern world information is a crucial component of survival. The ability to acquire and use information is considered to be an essential skill. This ability often reflects an individual's position in society. However, it is an interesting phenomenon that people do not always access information which could be beneficial for them (Chatman, 1991). Since the 1940s, researchers have attempted to identify and describe why different groups of the population acquire information at differing rates. Explanations for these differences in acquiring information include inequitable access

to information, psychological or educational barriers, and social systems which disadvantage certain groups in society (Chatman & Pendleton, 1995).

The knowledge gap hypothesis is a way of examining the significant differences in the ways the information rich and information poor search for, use and share information (Chatman & Pendleton, 1995). Recent knowledge gap research highlights that creating a more equitable knowledge distribution, assuming that this is a desirable goal in society, is not just a matter of redistributing information. It requires an analysis of how the message is presented and given to the receiver as well as looking at the characteristics of the receiver (Gaziano, 1983). Gaziano summarises this argument in her 1983 analysis of knowledge gap hypothesis research. "The knowledge gap reflects disparities in information as one among many resources which are less available to lower SES groups in society" (p.479).

The knowledge gap hypothesis first appeared in the literature in 1970 when presented by Tichenor, Donohue and Olien. It was originally defined as being the situation in which if mass media information is increased into a particular social system only some groups of the population will benefit. This results in the situation in which "segments of the population with higher socioeconomic status (SES) tend to acquire this information at a faster rate than the lower status segments, so that the gap in knowledge between these segments tends to increase" (Ettema & Kline, 1977, p.179). The hypothesis emphasises that lower SES individuals do acquire knowledge but at a slower rate than high SES individuals (Gaziano, 1995).

However, knowledge gaps do not always occur or increase (Gaziano, 1983). Researchers have attempted to specify conditions in which knowledge gaps do occur. There are many different theories as to what these conditions consist of, with no universal agreement in the research as to the exact causes. (Donohue, Tichenor & Olien, 1975; Ettema & Kline, 1977; Viswanath, Kahn, Finnegan, Hertog & Potter, 1993).

Gaziano (1983) has identified four different ways in which knowledge gaps can occur. She defines these as being:

> (a) gaps which are found at one point in time, and (b) gaps which may occur over time and may change in magnitude. Another important distinction is between (c) knowledge gaps which refer only to the relationship between education and knowledge without reference to media, and (d) gaps which are an outcome dependent on media exposure (p.449).

Tichenor et al., (1970) suggested that there were five factors which would contribute to widening gaps: (1) communication skills, (2) prior knowledge of the relevant issue, (3) social networks, such as interpersonal discussion, (4) exposure, acceptance and retention of information, and (5) the mass media, which is considered to be the primary source of general information (Ettema & Kline, 1977; Gaziano, 1995).

The original hypothesis implies that it is not possible to equalise the distribution of information, as increasing the flow of information will only benefit the higher SES individuals (Ettema & Kline, 1977). It is suggested that some portions of the public tend to be grossly uninformed on issues of general knowledge (Gaziano, 1983). Earlier findings of mass communication literature suggest that the greater the level of education, the greater the knowledge of various topics. Bailey (1971) indicated that education was strongly correlated with the level of information possessed by people with higher SES. He also considered the SES of an individual to be a significant factor in whether they could disseminate news and information. The increased use of education in knowledge gap hypothesis research signifies the extent to which it has been used as a surrogate for other SES measurements.

The underlying assumption of the hypothesis is that better educated segments of society are able to use media content to greater benefit. They are advantaged by media publicity, and gain appreciably higher levels of knowledge compared with the less educated segments.

> Consequently, knowledge gaps represent relative knowledge differentials and raises the issue of relative power deprivation as the better informed are more

> equipped to make decisions and act while the less informed fall further behind and are less able to exercise control over their own welfare (Chew & Palmer, 1994, p.271).

This hypothesis has generated a lot of debate, especially its assumption that knowledge and education are positively correlated. Although many researchers consider there to be a relationship between an individual's level of education and knowledge, there is little empirical evidence to support this claim (Gaziano, 1983; Horstmann, 1991). It may be argued that there is an implication in this theory that people with less formal education are inferior to educated people. Some earlier knowledge gap studies imply that formal education leads to more enlightened people who are considered in the research to be somewhat better than non-educated people (Donohue et al., 1975; Tichenor et al., 1970).

Neuman (1976) believes these earlier knowledge gap studies introduced the "know nothing phenomenon". This phenomenon seems to contain the inference that people at the lower end of the socioeconomic scale have themselves to blame for their lack of education and thus lack of awareness of public affairs information. A subsequent body of research has developed which moves away from "blaming the victim" for his or her lack of knowledge and examines the reasons why people are information poor (Chatman 1996; Chatman & Pendleton, 1995; Dervin 1980; Dervin 1989).

There are also incongruities in the original research, which discovered knowledge gaps did not occur in all situations. It was discovered that gaps widened for national information but narrowed for local information and that they may not occur for controversial issues or those of local interest (Ettema, Brown & Luepker, 1983; Gaziano, 1995). This again implies that education may not be the only factor influencing the presence of knowledge.

As a result of this criticism, the emphasis has shifted from education to include other variables, such as motivation, interest level and communication skills (Chatman & Pendleton, 1995; Ettema et al., 1983; Gaziano, 1983). Subsequently, the original knowledge gap hypothesis has been reformulated to move away from the emphasis on socio economic factors (Gaziano, 1983; Genova & Greenberg, 1979). Nevertheless

it should be noted some research is continuing to focus on differing education levels as an indicator of knowledge levels. Moore (1987), for example, uses education as the key variable when comparing the knowledge differences between people with lower education and those with higher education in relation to a political campaign.

Since the 1970s there has been much research into the knowledge gap hypothesis. In her review of the 25 years of knowledge gap research, Gaziano (1995) has located nearly 100 pieces of research on the topic. Viswanath & Finnegan (1996) identify three types of articles written about knowledge gap research. They identify these as being a) those which solely focus on knowledge gaps, b) those which examine correlations between education and knowledge, and knowledge and social class and c), articles which review and comment on the hypothesis.

The knowledge gap hypothesis has been approached by researchers from different angles to attempt to explain different situations. This has led to a lack of consistency in the research approach. Gaziano (1995) comments there is a need for more effective measurements, research designs and improved conceptualisation in knowledge gap research. She views this as being pertinent to the development of this body of research which has an important role to play in policy development as knowledge gaps continue to increase.

There are many different ways of looking at the knowledge gap hypothesis. For the purposes of this literature review, the knowledge gap hypothesis will be examined by using three current approaches in the research and two alternative approaches. Firstly, the effectiveness of using situational-specific differences to determine knowledge gaps will be explored. The use of motivation and interest factors are secondly considered. The original hypothesis placed a lot of emphasis on the impact of the media in creating knowledge gaps. This argument is discussed as well as examining some of the reservations associated with its use. Finally, two alternative approaches to the knowledge gap are discussed which move away from the link between information poverty and economic poverty. Dervin's (1980, 1989) analyses of information poor and Chatman's (1996) insider/outsider model are discussed.

1.1. Situational Specific Differences

There is a growing body of research which claims situational specific differences are a better predictor of knowledge gaps because they address whether or not the information is functional or relevant for the individual's needs (Chatman & Pendleton, 1995; Dervin, 1989; Donohue et al., 1975; Loverich & Pierce, 1984). Chew & Palmer (1994) sum up this approach when they state: "when a topic is of specific interest or appeal to a group regardless of whether it has more or less educated members, the group will tend to be well informed about the topic" (p.274). Interest in a topic will also determine the motivation to seek and transfer that information to other people. When there is a difference in interest in a topic among segments of the population knowledge gaps will widen. Gaps will narrow or remain constant when the topic is of interest to the majority of the population .

In a health related study, Chew & Palmer (1994) discovered interest-based gaps narrowed at a faster rate compared with education-based gaps. They argue that, despite a few exceptions, contributing factors to the knowledge gap are economic means, the level of communication skills, prior exposure to a topic of interest or concern, the type and status of social contacts and attitudes of the individual regarding the relevance of the information for their needs. They assert that the level of communication skills will impact on an individual's ability to access the available information.

Katzman (1974) emphasises the impact of communication and communication skills, rather than the media influences, as predictors of knowledge. He considers gaps are due to differences in education and communication abilities. Katzman proposes that the ability to make use of new information is dependent on the level of existing information, access to communication technology and the motivation to use communication resources. Again it is implied that increasing the level of information does not automatically correlate with a corresponding increase in knowledge.

1.2. Motivational Factors

There is growing support for the proposition that an individual's motivational interest is a factor in acquiring knowledge. Genova & Greenberg (1979) suggest the motivation to acquire the information and usefulness of the information are linked as predictors of the knowledge gap and that interest is a stronger predictor of public affairs type knowledge than education. Interest in the information is differentiated by its functional utility. They break information into "self interest" information for daily coping needs and "social interest" information required to maintain one's social networks (Gaziano, 1995).

Motivation to acquire the information was stressed as being a significant factor by Ettema & Kline (1977) in gaining knowledge. They believed knowledge gaps were influenced by the motivation to acquire information and the lack of relevance and use of media information for lower SES individuals (Viswanath & Finnegan, 1996). They also attributed individual factors, including communication skills and predisposition for a particular communications medium, as impacting on knowledge gaps. Ettema et al. (1983), when exploring links between motivation and knowledge, suggested a knowledge gap based on motivation widening but the knowledge gap closing under the influence of an information campaign.

When examining the effects of the knowledge gap in a health information context Ettema et al. (1983) found the motivation to acquire the information to be a stronger predictor compared to SES factors. They believed motivation was a strong factor in controlling the gap effects due to the specific topic, cardiovascular disease. People with cardiovascular disease were considered to be more highly motivated to access information about this topic than people without the disease. However, without having an accurate and practical way for defining or measuring a person's level of motivation about a subject, its use as a tool in establishing knowledge gap effects is considered to be limited.

Chaffee and Roser (1986) use a similar model in which information use is related to the involvement of the individual in the subject. Their study, examining the level of involvement of participants in a health campaign, also about cardiovascular disease,

found that involvement was a significant factor but it needed to be considered as separate cognitive, affective and behavioural variables.

Research conducted by Viswanath et al. (1993) found the relationship between motivation and knowledge to be more complex. When analysing the effects of a year-long health campaign comparing two groups of people with differing motivation, they found educational-based differences in both groups. They comment that, although motivation is an important factor, education also plays an important role in acquiring information. In essence, both education and motivation are crucial factors. Viswanath & Finnegan's (1996) review of knowledge gap research is more critical of using motivation to override SES factors. They comment that this link is tenuous due to the close relationship between motivational factors and knowledge and the issue that motivation could in fact be activated due to increased knowledge. They also question who is motivated to acquire information and suggest this could be associated with greater education.

Gaziano (1995) views the role of motivation, interest and related variables as an area for future research. She comments that these factors need greater clarification to identify their role in influencing knowledge gaps. She uses the example of the variable interest to explain that it can relate to self-interest, reference group interest and membership group interest as well as behavioural factors. This lack of consistency in identifying variables in knowledge gap research has created difficulties in interpreting results from different studies. There is also a need to explore the effects of the interrelationships of the independent variables.

1.3. Media Effects

Current research tends to indicate that mass media play a less significant role in the lives of people with lower SES and that other factors also need to be considered (Chatman & Pendleton, 1995; Chew & Palmer, 1994; Katzman, 1974). Chatman & Pendleton (1995) argue that only localised items and those which people can relate to their lived experiences are absorbed. The media is used as a means of recreation,

not as a means of receiving relevant information. This may be due to an inability or lack of interest in addressing the contextual use of information.

This contrasts with Gaziano (1983), who suggests that media publicity is largely instrumental in narrowing knowledge gaps. Gaziano (1995) cites recent studies which also support this finding. She identifies conditions which appear to be instrumental in the process of reducing knowledge gaps. These include the interest of the topic, the type of topic, geographical scope of topic, and the presence of conflict. Viswanath & Finnegan (1996) also add media access, knowledge complexity and community social structure to the list.

Gaziano (1983) states that as the amount of mass media publicity increases, high SES individuals will acquire knowledge at a greater rate than low SES individuals, so that the gap in knowledge between social strata tends to increase rather than decrease. This also impacts on the balance of social power, if power is considered to be related to knowledge, high SES individuals will be deemed to have greater social power. Therefore, gaps in knowledge could also indicate power inequalities between high and low SES (Donohue et al., 1975).

Gaps can be related to the type of topic or issue being discussed. Gaziano (1983) proposes that gaps occur when topics, such as public affairs news, have more appeal to high SES individuals than to low SES individuals. Alternatively gaps do not often occur in issues which have high appeal to low SES individuals. Gaps are likely to be found when national or international issues are studied, but gaps may not occur when issues are small or issues are localised. Community involvement in an issue is thought to contribute to reduced gaps. This is particularly true if the issue is of high community importance. The presence of conflict about an issue is considered to result in narrowed gaps through promoting discussion about the issue (Viswanath & Finnegan, 1996). Gaziano also observes that people of all SES backgrounds tend to be interested in health issues. However, knowledge gaps can still exist in this area.

When researching the effects of the media on knowledge gaps, Gaziano (1983) discovered that when newspapers emphasise a topic over a long time readers are more likely to know about the topic. High levels of newspaper coverage of local issues

and high levels of neighbourhood newspaper coverage also contribute to reduced gaps. Television may be a knowledge leveller because of the greater access to this medium. Neuman (1976) argues television viewing is not correlated with education. Less educated people may prefer the television to gain information as there is not a requirement for literacy.

When analysing one-time case studies outlining the media effects on knowledge, Gaziano (1983) notes that high newspaper coverage led to reduced gaps in local issue knowledge. When media publicity is sustained for a period of time, and is concentrated, gaps in awareness knowledge may be close to non-existent. However, even if media coverage on an issue is highly focused, SES gaps may be noted for indepth knowledge. Gaziano postulates that when media exposure and non-exposure are contrasted, media exposure leads to knowledge gap reductions.

Gaziano (1983) reasons knowledge differentials depend on how information campaigns and information delivery systems are organised. The United States media is structured to benefit the upper stratum, it is argued. This group has access to a greater quantity of accurate information than lower SES individuals through print, organisational membership, formal schooling, and high status personal contacts. It is argued this results in a severely constricted information flow of accurate information about public affairs to low SES individuals, a flow which consigns SES individuals to a more closed information system than upper SES individuals. Mass media are not used by people with lower SES to assist them in coping with problems. Mass media are thought to be sources of recreation with the role of providing them with a sense of local and national affairs as topics of conversation. Low SES individuals have a different kind of knowledge when compared with high SES individuals, which is not necessarily useful for social mobility or advancement. Public affairs knowledge is argued to be the knowledge upon which social power is based.

In addition to the disadvantages lower SES individuals appear to face regarding media channels, Viswanath & Finnegan (1996) maintain that in relation to knowledge complexity higher SES individuals benefit for similar reasons to those outlined by Gaziano. They argue that high SES individuals usually have more formal education

which provides them with the skills to interpret and comprehend information. Higher SES individuals are also considered to have far reaching social networks and access to information through their organisational networks.

1.4. Alternative Approaches

The third approach examines the knowledge gap from the perspective of people being information rich and information poor. It examines Dervin's (1980, 1989) research in order to specify the conditions in which individuals seek information. Chatman's (1996) insider/outsider model is then used to offer an alternative approach to the knowledge gap hypothesis and to move away from the link between information poverty and economic poverty.

The traditional communications model has a source sending messages to a receiver. The receiver is responsible for whether or not he or she receives the message and is to blame if the message is fumbled. Message transmission, however, is not always predictable. Dervin (1980) faults the sender/receiver model because of difficulties in appraising receivers of the message by using measures such as their level of education, income, status. She favours using a model which focuses on information seeking and uses of the information.

This emphasis on identifying the needs of the information poor, rather than focusing on their deficits, is beginning to gain support in the literature (Balnaves, Caputi & Williams, 1991; Balnaves & Caputi, 1997; Chatman, 1996; Dervin, 1980, 1989). Balnaves et al. (1991) believe the research focus needs to be more "user orientated" to identify information and communication needs of the information poor. To achieve this they suggest policy makers and community agencies need to have available comprehensive conceptual and methodological tools.

Dervin (1980) argues that traditional ways of viewing the users of communication systems have resulted in a society of "haves" and "have nots". Through proposing a typology to predict information use, Dervin believes there are specific conditions in which individuals might seek information. These include decision situations, worry

situations, barrier situations and problematic situations. This model also highlights the urgency with which an individual approaches information sources as opposed to just examining the SES of a person.

Dervin (1989) outlines the characteristics of people who are able to easily access information. They are those who have the resources, time and skills to do so, they are most like the information sender, wealthier, educated and having the appropriate social networks. They could also be defined as high SES individuals. She states the introduction of communication technology has made little difference to this situation. "That is, the information rich get richer, the poor get poorer," (1989, p.219). This is illustrated through poorer, less educated people having less access to information and therefore being more likely to face situations in which they feel powerless. Dervin (1989) believes this situation is reinforced by members of this group not appearing to be actively seeking the information which might help address their predicament. The only way to overcome this situation, she argues, is for the information poor to become "culturally homogenized" to reach what Dervin terms as the "communication fast lane" (1989, p.220). This assumes that people wish to become information rich and that they have the skills to reach this lane.

Dervin (1989) relates the knowledge gap back to the formation of communication systems in which we have a situation of ownership and management determined by the market forces but a lack of diverse users. This leads to a situation where the communication systems are unable to effectively reach the so called information "have nots" as they have been developed to meet the needs of the information "haves". Dervin raises the question of whether it is the receivers of the information who need to change or it is the responsibility of the source to change. This concept is also raised by Loverich & Pierce (1984) who state properly designed and implemented communications will help low SES people receive information they can use. Viswanath et al. (1993) argue that when attempting to distribute knowledge, information strategies need to be in place to increase motivation. They stipulate that knowledge gaps are less likely if less advantaged groups are reached by making changes to the communication systems to channel an increased flow of information and also to

increase access to this information. Involving people (especially lower SES) in groups is highlighted as one way of increasing motivation for information.

Dervin's (1980) approach has generated criticism from Viswanath & Finnegan (1996). They take exception to her assertion that knowledge gap research focuses on blaming the victim and morally judges people's lack of knowledge. They argue that knowledge gap research does not focus on the individual but actually examines "social structure and its constraints" as it is concerned with "resource and power inequities" (p.216).

Subsequent research by Chatman (1996) has resulted in a shift away from the link between information poverty and economic poverty. She has developed a conceptual framework which links the world of insiders to that of outsiders. Insiders share common cultural and social experiences. Their information needs and sources are very localised. "... it is one in which outsiders are usually not sought for information and advice. And it is a world in which norms and mores define what is important and what is not" (Chatman, 1996, p.205). Chatman believes that people will first decide if someone is an insider or an outsider to their group before examining their need for knowledge and its use. They may actually reject information not created by themselves.

Chatman defines four criteria of the information poor: risk-taking, secrecy, deception and situational relevance. Risk-taking behaviour is used to protect the person. In this circumstance trust needs to be developed before information will be revealed. Secrecy is used to guard against disclosure and involves avoiding revealing one's real state of affairs. "Moreover, disclosure would surely led to dire consequences. Finally, sharing the information would not necessarily mean that the audience would sympathize" (Chatman, 1996, p.200). Deception is used to appear to have an ability to cope and to be viewed as capable as others at solving problems. Situational relevance refers to the utility of the information to some concern or problem. The source of information needs to be legitimised by other significant insiders. Chatman comments that even when a source is perceived as being used, it still may be ignored as it requires "too much effort or might lead to personal compromise" (p.202).

The key to people benefiting from information provided by outsiders is trust. Chatman (1996) believes there needs to be trust during the information exchange process. The

information poor do not share their real state of need because they feel the cost of doing this is too high. Chatman maintains this is also due to a lack of trustworthy opportunities to exchange information. She states:

> So, even though each person will approach things from a slightly different set of lenses, what holds a social reality together, and ultimately, establishes proper bounds for information-seeking is the recognition by others that those behaviours are customary ones to pursue. Simply stated, then, to convince others that one's problems are not delusory, that they do speak to common experience in my life-world, others who share this world must validate both the problems and authenticate the properness of the search (p.203).

The willingness to pursue and receive information is related to the influence of other insiders. Chatman states they define what problems can be pursued and which ones are acceptable for public disclosure. Information seeking is therefore linked to cultural and social norms. According to Chatman, this link provides an important insight into why some sources are used while others are ignored. Social norms, she believes, act as reference points giving guidance for the conditions in which information transfer may occur.

The knowledge gap hypothesis is a useful framework when examining the relationship between Pacific women and cervical screening information in New Zealand. As the preceding discussion has indicated, however, this framework has to be used with caution.

There are inconsistencies in the research as to how knowledge is actually measured (Gaziano, 1983). A lot of the research places emphasis on the news media in narrowing knowledge gaps. For example, sustained coverage in a local newspaper and the television are thought to be knowledge levellers (Gaziano, 1983). However, there is little known about the use of interpersonal contacts and the effect of these sources in providing accurate information.

Interpersonal contacts, especially including lots of discussion about local issues, may tend to lessen gaps, but interpersonal news sources may be less accurate and depress knowledge levels. Interpersonal contacts may actually be unhelpful in providing

information and in problem solving. It is suggested that close low SES communities are things of the past and that members of this group of people are actually socially isolated and do not trust one another (Chatman & Pendleton, 1995). Viswanath & Finnegan (1996) believe interpersonal contacts may be highly effective in reducing gaps but also comment the potential of this channel is unclear because of lack of research.

It also needs to be noted that communication does not happen in a social vacuum and there are many variables at work. Rarely do people obtain information from just one source. Often information gathering is an ongoing process and information may be used at a later time and situation (Chaffee & McLeod, 1973).

There has been a marked absence of knowledge gap research in New Zealand research with few studies on the subject. Coney (1988) and the Public Health Commission (1994), however, have identified the role culturally appropriate information plays in increasing knowledge.

There is also a need for research which moves away from the emphasis of explaining gaps in knowledge as being due to inadequacies of the lower SES individual or information poor and begins to examine ways of addressing this imbalance. Gaziano (1995) suggests a move toward examining attitude gaps, behaviour gaps, value gaps and their interrelationship with knowledge gaps. She sees this as improving information campaigns especially in the areas of health and public affairs.

While the knowledge gap research provides a useful framework from which to examine and explore how Pacific women access health information, alternative approaches also have a significant contribution to make. Dervin's (1980, 1989) approach, outlined earlier, examines people's need for information and attempts to specify the conditions in which people approach information sources rather than just relating the SES of a person to their ability to obtain information. This approach and Chatman's (1996) insider/outsider model are an effective way of refocussing on the message being transmitted rather than unrealistically expecting the message receiver to change their communication behaviour regarding the way they prefer and respond to information being transmitted.

2. Cross-Cultural Communication Research

Increasingly we live in a multicultural world where cross-cultural communication is a necessity. In New Zealand there is a large multicultural component to our population (Metge & Kinloch, 1991). This is due in part to the Pacific Island immigration in the 1960s and 1970s for manufacturing employment and more recently the Asian influx into more professional occupations (Chong & Thomas, 1996). There were 41,862 Pacific women in New Zealand aged between 20-69 years when the 1991 census was conducted (Ministry of Health, 1996).

Metge & Kinloch (1991) argue that living in a multicultural society does not mean that people are knowledgeable about any cultures other than their own. Since New Zealand culture has been developed on the values and traditions of the dominant Pakeha culture, many of the other cultures may feel inadequate or uncomfortable approaching the services offered.

People of different cultures attach priority to different values and conventions. This is often evidenced in their beliefs and attitudes towards themselves, others and events that take place in around them (Harris & Moran, 1991). The authors believe the concepts of health, wellness and medical problems are defined by culture. There is great diversity in the world as to how medical issues are approached.

The New Zealand cross-cultural research has been largely prescriptive in nature. Chong & Thomas (1996) view this research as examining the means to communicate and in the employment context focusing on the management-subordinate relationship.

The basic communications model of a source sending messages to a receiver relies on the sent message being correctly encoded by the receiver. Daniel (1976) argues that this is not always possible in a cross-cultural context. He believes that each culture has different symbols, they use different channels and that the message is encoded and decoded in different ways. He stresses the need to identify those channels regularly used by the intended audience and focus on utilising these rather than assume how the audience would like their information transmitted.

Hetch, Larkey & Johnson (1992) postulate that communication is perceived as problematic and cross-cultural communication is even more so. Again problems in the communication model are highlighted, particularly the lack of common definitions regarding such areas as the situation, messages and conversational rules when people of different cultural backgrounds communicate. However, Hetch et al. stipulate that effective communication can occur by managing these problems.

Hetch et al. (1992) focus on the need for understanding how a specific ethnic group defines effective communication before generalising across other cultures. Ethnic groups only partially share their communication systems with other groups, creating a need to understand their ethnic identity. This view of communication as being problematic can be conceptualised as a model consisting of "ethnic identity, communication issues, conversational improvement strategies, and communication satisfaction" (Martin, Hecht & Larkey, 1994, p. 238).

Martin et al. (1994) assume that cross-cultural communication is neither effective nor ineffective but problematic, needing strategies for adjustment. This then allows for the focus to go on ways of improving the communication process rather than debating the effectiveness of current communication.

3. A Public Relations Perspective

Jefkins (1992) argues that when working in public relations framework it is necessary to group people together depending on their perspective on an issue. Communication activities are then aimed at selected groups of the general public, termed target publics or audiences. Target publics are described as groups of people who have shared meanings on particular issues (Banks, 1995). The aim is not to communicate a general message to the mass public but to selectively direct the message to the specific needs of the target audience.

Target publics can be further defined depending on their stance on an issue. Grunig & Hunt (1983) state that there are three levels of awareness of publics. Firstly, they must face a similar problem. Secondly, they must recognise the problem exists. Finally

they must organise to do something about the problem. Grunig & Hunt classify publics depending on their level of awareness.

If a public does not meet any of levels of awareness listed above it would be termed a non-public. When a group of people is not even aware that it faces a problem it constitutes a latent public. When a group begins to recognise the problem it is classified as an aware public. The fourth category, an active public, is used when a public organises to discuss and do something about the problem.

This classification is useful when determining how to best reach the target public, as a communication strategy can be developed according to the target public's level of awareness. In a cervical screening context the level of awareness would probably be different for each of the different target publics in New Zealand. It may be the case that Pacific women could be termed a latent public and are not aware that they even face a problem. Classifying the publics would be a useful tool in ensuring that even latent publics received a message that was specific to their needs and situation.

Banks (1995) argues that from a public relations perspective, communication is intercultural as it is aimed at target audiences with their own particular needs and views. He implies that it is the public relations practitioner's responsibility to ensure that the target audience can interpret the information within their own cultural frame of reference. "Therefore the choice of symbolic codes that are culturally meaningful to publics is the responsibility of the public relations practitioner" (Banks, 1995, p.39).

It also needs to be recognised that people create meanings depending on the context in which the information is transferred. Therefore a message can usually be interpreted in many ways (Banks, 1995).

4. Health Studies

This section of the literature review will discuss the areas of cross-cultural health communication, concepts of health, cervical cancer research and promoting health messages. It will also examine cervical cancer from a knowledge gap perspective.

The literature relating to cervical cancer appears to focus predominantly on the medical aspects of the disease, with little research examining how to communicate about cervical cancer awareness. Macdonald (1992) comments that much of the literature tends to focus on the physiological and the technical aspects of the disease, examining such issues as the cell appearance or the functioning of a screening programme. While this focus is useful for gaining an insight into the dimensions and possible causes and treatments of the disease, it allows little understanding of how women perceive the disease and how effective has been the communication with women about cervical cancer.

This lack of understanding is particularly apparent where Pacific women are concerned. There appears to be a gap in the literature relating to Pacific women's understanding of cervical cancer and the most appropriate ways of communicating health information to this group. The notable exception is the research conducted by the Public Health Commission (1994) and the Ministry of Health (1996). The National Cervical Screening Programme Policy produced by the Ministry of Health (1996) gives a brief statistical and cultural profile of Pacific women in New Zealand, as part of their analysis of the priority groups. The Department of Health (1990) and the Public Health Commission, Pacific Wave Trust and the Ministry of Health (1994) developed guidelines for promoting cervical screening which outline practical ways of reaching Pacific women in a culturally appropriate way. These booklets are targeted at health workers.

4.1. Cross-Cultural Health Communication

The importance of providing information in a format that is understandable and acceptable to the person requiring the information was highlighted by Coney's (1988) discussion of the Cervical Cancer inquiry at National Women's Hospital in 1987. She considers people were blamed for not understanding the information provided by the hospital about the cervical screening programme, rather than the hospital examining the way in which it was communicating the information.

The high Maori and Samoan population of the National Women's Hospital catchment area meant that cross-cultural communication was a necessity. The fact that no interpreters were employed, during the period prior to the inquiry, resulted in hospital domestic staff, relatives and other patients being used as translators. Coney (1988) reasons this led to an embarrassing situation where women had to ask intimate questions through an untrained interpreter to gain an understanding of their medical condition. The risk of misinterpretation was significant as the interpreters had no understanding of the medical terms.

Coney (1988) concluded Pacific women needed interpreters not only to help with the language barriers but also to act as advocates for Pacific women. Another reason to employ interpreters was to also help them decide what treatment choices they wanted to make, rather than to automatically defer to the medical authority and accept their treatment, which was the culturally accepted course of action.

The need for interpreters was stressed in the Report of the Cervical Cancer Inquiry (1988) especially in view of the multicultural status of Auckland in which it cannot be assumed everybody has a strong command of written or oral English. The report recommended that interpreters be trained to clearly explain treatment and procedures, and to be "bound by the rules of patient confidentiality" (p.159). The report stated hospital workers, other than health professionals, family and friends, are not be relied on as interpreters.

Tyler (1996) indicates that there are specific skills necessary for interpreting. Knowing two languages does not constitute interpreting. In a medical situation an interpreter needs to have an understanding of medical ethics, especially the need for confidentiality, and a cultural understanding of illness is needed to ensure medical terminology is phrased appropriately. She states it can be psychologically damaging for children to be used to interpret for their parents, as this can cause role reversal. It is also not always culturally appropriate for young people to say certain things to older people.

4.2. Concepts of Health

The way society treats sick women and sick men may influence the way in which women experience disease. A woman may have a different perception of herself when she is sick and society may view her differently from a sick man (Doyal, 1991).

When developing health promotion strategies it is important to recognise women's own experiences, knowledge and skills in caring for people. Doyal (1991) believes women gain a lot of informal knowledge about health through their interactions with other women. She also asserts that through their socially constructed caring role in society women have experiences with caring and treating sick people. These are experiences which most men do not gain.

According to Doyal (1991) women's health issues have received little emphasis in the development of health promotion policies. She believes that most of the decisions regarding the policies are formulated by men who do not understand the lives or health needs of women. An understanding of the relationship between women's health and the social and economic roles of women needs to be gained to rectify this situation.

Macdonald (1992) asserts that the perception of the body is affected by such factors as ethnicity, education, age and socioeconomic status, which contribute to the beliefs an individual holds about how the body functions. This individual conceptual system impacts on attitudes about the body and its need for maintenance. Macdonald believes the way in which people talk about their bodies gives an insight into their attitudes.

Doyal (1991) argues health promotion policies will only be effective if they are developed with an understanding of how the gender roles impact on health. The aim being to ensure that false assumptions are not made. When examining the reasons why women did not use cervical screening programmes Peters, Bear & Thomas (1989) found more understanding of the women was needed and a knowledge of the barriers that prevented them from taking part in a programme.

Doyal (1991) uses the debate about cervical cancer to illustrate her argument. Research in the 1860s discovered that nuns had extremely low levels of cervical cancer when

compared with prostitutes. This resulted in the assumption that it was a woman's sexual habits that lead to the disease. Only recently has any emphasis been placed on the sexual activity of the male partners as a contributing factor to the disease. Doyal believes that judgements about women's lives rarely contribute to any health benefits and result in assumptions about the causes of a disease rather than examining ways of preventing it.

Preventive medicine involves both primary and secondary prevention through the identification and reduction of risk factors (Gifford, 1990). Cervical screening and health education come under this category.

Gifford asserts that the success of primary prevention rests upon culturally shared attitudes of the target population about disease and illness. Not all cultures take the same approach to disease and illness.

> Within cosmopolitan medicine, it is understood that non-infectious or chronic diseases often have a long period of onset, taking years to develop to the stage where symptoms arise and a person begins to feel ill. Thus the rationale for health education is often based on the belief that early intervention in risky life-styles can prevent the onset of disease. However, the concept of a slow development of a disease is not necessarily a culturally universal concept (p.74).

This can be seen in the New Zealand context where the Maori and Pacific Island approach to disease is different from the Pakeha. The Pakeha approach is grounded in conventional medicine and very little emphasis is placed on alternative medicine. Preventive medicine is a difficult concept for many cultures to vindicate as its success relies upon checking one's health before any symptoms are evident. For a condition such as cervical cancer which can be present before its physical symptoms and which is not commonly known in the Pacific Islands, preventive medicine could be considered a necessity in preventing mortality from this disease.

The issue that not all cultures subscribe to the belief that disease can exist in the absence of illness is further complicated by the treatment for a disease often causing short term illness. For example, the treatment for cancer often causes long periods of chronic sickness. Gifford argues this belief can lead to the situation where patients

will not follow prescribed interventions and treatments unless they have a corresponding illness. In the case of cervical cancer, there is a long period of time before the effects of the disease are apparent (Straton, 1994).

Recent Australian research suggests that non-English speaking communities have a low utilisation of health promotion and illness prevention services compared with the Anglo-Australian population (Gifford, 1990). Gifford's research has focused on current attitudes and health beliefs with the goal of improving education and access. Gifford perceives a lack of research in the areas of cultural concepts of health and the social and cultural perceptions of being "at risk" and therefore participating in education and prevention programmes. This lack of research in the cultural arena is also apparent in New Zealand.

4.3. Cervical Cancer Research

Cervical cancer is generally considered to be preventable through using a cervical smear to detect precancerous changes to the cells of the cervix, located at the neck of the womb. If these changes are not detected and treated early enough, the cervix can be become cancerous and the cancer can spread to other parts of the body (Ministry of Women's Affairs, 1989; Straton, 1994). In New Zealand, approximately 250 cases of cervical cancer are diagnosed each year and about 100 women die from cervical cancer (Ministry of Health, 1996).

Research in New Zealand and overseas has shown regular cervical screening through an organised programme to be very effective in reducing the incidence of cervical cancer (Adams, 1991; Ministry of Women's Affairs, 1989; Peters et al., 1989; Straton, 1994). Regular screening is thought to reduce the incidence of cervical cancer by 60 to 70 percent (Moodie, Kljakovic & McLeod, 1989). As well as providing benefits to the women concerned, this can also equate to large long term savings in the health budget (Federation of Women's Health Councils, 1992).

Women who are not regularly screened are usually the women considered to be at greatest risk of developing cervical cancer (Peters et al., 1989). It is suggested that

women who develop invasive cancer often have not had regular smears or even had a single smear (Moodie et al., 1989). Australian statistics show that 14 percent of women who have no history of cervical screening produce 60 percent of the cancers found (Bitomsky, 1997). The recommended screening interval is three years for previously normal smears and yearly if any abnormalities are shown (Ministry of Health, 1996).

Australian studies indicate a higher incidence of cervical cancer in older women (Gifford, 1990). This trend is also apparent in New Zealand, as well as an increasing rate of cervical cancer for women under the age of 40 (Federation of Women's Health Councils, 1992; Moodie et al., 1989).

Maori, Pacific, non English speaking and women on lower incomes appear to have lower screening rates (Ballie & Petrie, 1990; Bonita & Paul, 1991; Paul, Bagshaw, Bonita, Durham, Fitzgerald, Jones, Marshall, McAvoy, 1991; Public Health Commission, 1994). It is inferred that these particular women are more at risk because of this low screening rate.

The rate of cervical cancer is thought to be higher in Pacific women compared with all New Zealand women (Cox & Skegg, 1989; Ministry of Health, 1996; Public Health Commission, 1994). This does not necessarily equate to a higher mortality rate (Ministry of Health, 1996). It is suggested this mortality rate is inflated due to a number of women from the Pacific who are screened while visiting relatives and friends in New Zealand (McSherry, 1997). However, it should be noted that there is little accurate information on the screening rates of Pacific women (Public Health Commission, 1994).

Because of the low screening rates, Maori, Pacific women, non-English speaking women and older women, have been targeted as groups needing special attention emphasis and have been termed "priority groups" (National Cervical Screening Programme, 1990; Public Health Commission, 1990).

Peters, Bear & Thomas (1989) argue that the identification of barriers to screening is crucial when aiming to reach women who are not regularly screened. They group

the barriers into six categories. The first category are cognitive barriers which include the lack of understanding about cervical cancer and its preventative nature. The emotional barriers are the second and third categories. These are separated into the fear of being examined and the dislike of the whole process. The fourth category are the economic barriers which include the amount of time or money needed to take part in screening. The fifth category are logistical barriers which cover the problems of transport, childcare, language or having no regular doctor. Finally, the sixth category are the social barriers covering such issues as the doctor not suggesting having a smear or the lack of support from a husband or partner.

There appear to be particular factors which are causing barriers to Pacific women having regular smears. Cox & Skegg (1989) emphasis that the cervical screening programme needs to take into account the "special needs of Pacific Islanders" (p.114). No details are provided of what the special needs of this group comprise. Lack of understanding about the preventative nature of cervical screening, the recommended interval between screening and fear of the examination itself were also cited as barriers to cervical screening (Peters et al., 1989).

Recent research on Pacific women has highlighted embarrassment and prioritising the family's health needs before their own as being barriers for women having a cervical smear (Public Health Commission, 1990). The Public Health Commission also considered lack of knowledge a barrier for older Tongan and Samoan women but cost or transport were not apparently significant factors.

Ma'ia'i (1992) believes that Samoan women, in particular, are unready to accept cervical screening because of past cultural traditions which still impact on current beliefs. He gives the example of the ancient practice of the ceremonial defloration of the virgin bride in public which is crucial to the idea of female virginity. Although this practice does not exist today a woman's anatomy is not talked about openly. He also mentions the confusion with cervical screening and screening for sexual diseases and suggests this stigma could easily lead to a woman's loss of face after a consultation.

Lack of understanding of English and attitudinal barriers are reasoned to be large factors in Pacific women not accessing cervical screening services (Public Health

Commission, 1994). These barriers included economic, language problems, "lack of knowledge about services, inappropriate health promotion programmes, and cultural values such as shyness and deference to authority" (Ministry of Health, 1996, p.15). Australian research (Australian Institute of Health, 1991), regarding Aboriginal and Pacific women, also identified barriers for this group of women including the feelings of "embarrassment, shame, lack of privacy and fear of the pap test and the results" (Australian Institute of Health, 1991, p.169).

The National Cervical Screening Programme policy (1990) recommends education and the involvement of women throughout the programme as ways of promoting the participation of women. The affordability, choice of smear taker and venue are also considered to be key factors in encouraging participation. Adams (1991) further reinforces the need for services to be culturally appropriate and accessible to both women of low and high SES. She notes the lack of overseas research examining the cultural appropriateness of the cervical screening services provided.

Australian research suggests immigrant women prefer to use hospital based women's health clinics, as they are familiar with the surroundings through their pre and ante-natal experiences and the availability of an interpreter at the clinic (Gifford, 1990).

Australian immigrant women preferred to see a doctor who could speak to them in their own language (Gifford, 1990). However, they did not necessarily wish to see a doctor from their community as their community was so small that confidentiality and anonymity could not be assured.

The age of the doctor was another contributing factor. Many women would not feel comfortable being examined by a young male doctor, who may be the same age as their son.

To overcome these barriers, the Public Health Commission (1990), the body which determines public health policy and purchases public services, recommended promoting the health message in each main Pacific Island language by health workers of the same ethnicity and advertising the existing services more effectively. No guidance was given to the method of achieving these outcomes. It also recommended

using meeting places that were familiar and comfortable to Pacific women to promote the message. The Australian Institute of Health (1991) indicated that the provision of a female smear taker was important for such a "sensitive" matter (p.169).

4.4. Promoting Health Messages

Three themes emerge from the literature when discussing the most effective ways of promoting of cervical screening to Pacific women in New Zealand. The first, is providing written and verbal information in the Pacific languages which is consistent with their culture. The second, highlights the importance of examining each Pacific culture individually rather than collectively. The third, stresses the need to acknowledge the different perceptions of health.

The Public Health Commission (1994) emphaises the importance of developing information in partnership with the Pacific women to ensure it is developed holistically to incorporate the Pacific cultural beliefs. They state that "To achieve this Pacific Island women should be involved in planning and implementing the screening programme" (p.25).

The Public Health Commission (1994) believes that increasing the number of Pacific Island smear takers and educators is one way of achieving partnership. In its report to the Minister of Health it recommended that the Regional Health Authorities purchase cervical screening programmes which promote Pacific women into these roles. The report also supported cervical screening programmes ensuring all women have access to a female smear taker. It listed cultural appropriateness as being a key component of the service provided.

These recommendations have been developed into the National Cervical Screening Programme Policy (1990). The policy again stressed the importance of choice for Pacific women and of access to Pacific educators and smear takers (Ministry of Health, 1996).

The Report of the Cervical Cancer Inquiry (1988) recommended consultation with the women about the type of service provided to ensure it meets and is sensitive to their needs (Ministry of Women's Affairs, 1989). Consultation with Maori and Pacific women was also suggested as well as the preparation of visual and written educational resources about the standard treatment of cervical cancer at its different stages (Ministry of Women's Affairs, 1989).

According to the Ministry of Health (1996) any health promotion activities need to be adapted to the social and cultural circumstances of the people they are targeting. The information provided needs to be "technically accurate, educationally and culturally appropriate and available in appropriate languages for the women to make an informed choice on having a cervical smear and enrolment on the National Cervical Screening Register" (p.17).

This issue was also discussed by the Australian Institute of Health (1991) when discussing the ways of reaching Aboriginal and Pacific women. They emphasised the need to consider the circumstances and cultural background of the women when developing information and services.

Macdonald's (1992) research, examining Waikato women's experiences and understanding of cervical screening, highlighted the way in which Pacific women use their communication networks for the dissemination of information. The use of health workshops run through the church has been very successful for conveying nutrition information.

Informal sources, including talking with friends and family, magazine articles, are a way of gaining health information about possible causes and cures of illness. Although this appears to be a strong information link, because of its accessibility and lack of cost, Macdonald raises the question of how this information reaches these networks and how well it is actually understood.

When assessing the professional sources of health information, the women listed their doctor, family planning clinic and pamphlets produced by the Department of Health as their sources of information. Macdonald (1992), however, suggests that the women may not always know how to ask the questions to gain the necessary information and the professionals may not answer, or if they do it may not be in an understandable way. Her research implies that often the women did not understand the process and reason for having a cervical smear and, therefore, were not satisfied with the amount of information they were given. This underlines the importance of public health information programmes to provide information.

The need for health services to acknowledge the barriers faced by Pacific women is considered to be a key way of ensuring a culturally appropriate service is developed and maintained (Ministry of Health, 1996).

The second theme in the health promotion literature was the importance of treating Pacific women as members of their own individual island culture rather than merely as members of the collective Pacific Island culture (Federation of Women's Health Councils, 1992). This point was stressed in the Public Health Commission (1994) recommendations to the Minister of Health. It stated that:

> When considering the participation of Pacific Island women it must be recognised they are not one group but six main groups - all with distinct language and cultural differences. The needs of these groups may be similar but are not identical (p.25).

Each group has a different approach to situations as a result of their differences in culture, customs, values and traditions (Ministry of Health, 1996). It is important to acknowledge these differences to ensure that services and education are acceptable to the women (Federation of Women's Health Councils, 1992).

The third theme raised in the health promotion literature is the different perception of health by Pacific people. There is a need to approach health holistically, to incorporate the mental, social, spiritual, cultural and family aspects as well as just the physical ones (Ministry of Health, 1996).

For health services to be effective, the Ministry of Health considered that they also need to be people-orientated rather than problem-orientated. The services needed to capture the cultural aspects of providing a service rather than just focusing on the medical issues involved. This view was supported by the Federation of Women's Health Council (1992) which stressed that any education or information services needed to incorporate the needs and significant cultural aspects of the people.

Ma'ia'i (1992) believes Samoan women who come to New Zealand may not have the education necessary to fully understand their reproductive system and the importance of preventive cervical screening.

> Her manifold difficulties stem from shyness, modesty, traditional attitudes, behaviour and ethnic belief. Her education and adaptation to the new environment are other determinants which could effect a change hopefully for the better for her. Preventive medicine does not rate highly amongst the Samoan women who, fatalistically, would rather not know the future but just live now (p.69).

Ma'ia'i suggests the voluntary approach may be too casual for Samoan women who are used to a "head orientated lifestyle". Free will and individual preference are not part of the culture, instead direction is given from the head of the network. He also notes the church in New Zealand is being used by the Samoan people as a "surrogate village" in which social activities are developed and women become involved with helping.

Gifford (1990) argues the medical profession needs to develop cultural sensitivity incorporating a cultural understanding of health and "normal" body functioning. She believes this requires a fundamental change in medical thinking from focusing on abnormality to helping people to improve their current and future state of health.

In 1990, the Public Health Commission and the Ministry of Health developed a cervical screening health education kit for Pacific women. This was developed based on the research undertaken by Takinga-Iva and Margaret Devlin together with Pacific women,

which recommends educational sessions and resources in Pacific Island languages using Pacific Island symbolism. (Department of Health, 1990; Public Health Commission et al., 1994). The Pacific education kit contains a range of items. The key items are flipcharts which have been developed in conjunction with the Pacific Islands Women's Health Project:

> The charts have been designed as a tool to communicate with Pacific Islands people about some health issues which are of a sensitive nature... Most of the pictures are symbolic and unique to each ethnic group. Many of the pictures are of some significant symbol that incorporates both health and sickness (Public Health Commission et al., 1994, p. 11).

They are used to introduce the naming of the anatomy, specifically the cervix and vagina. Different flipcharts have been developed for the different Pacific groups.

Other important items in the Pacific education kit include a poster, video, pamphlets in the Pacific languages and English, and a smear kit containing a model of the cervix to explain the procedure. Finally, the kit includes guidelines for the use of the materials contained in the kit (Public Health Commission et al., 1994).

4.5. The Knowledge Gap and Health Studies

Peters et al. (1989) highlight SES factors as being significant reasons for women not having cervical smears. In a study comparing women who have never been screened with those who have been, they found that the women least likely to be screened were those who had low SES. This was measured by their level of income, level education and type of neighbourhood. These women were often older and unmarried, or if married had more children, and in all cases had less frequent contact with the medical profession. They also discovered that, regardless of SES factors, the women who were not screened regularly did not understand the preventative role of screening, or the recommended screening interval and they were afraid of being examined.

International research has found strong links between women of low SES and low screening rates (Adams, 1991). Straton (1994) links age, marital status, education and SES in her analysis of Australian research. She likewise found that being a woman of non-English speaking background was a strong indicator of having a low screening rate, although there was a lack of data to support this. Subsequently, she believes this factor has important implications for the focus of screening programmes.

Mandelblatt, Traxler, Lakin, Kanetsky and Kao (1993) identified this link with both cervical and breast cancer.

> Previous studies of non- or underutilizers of breast and cervical cancer screening have found that women of increasing age, non-white race, and lower socioeconomic class are less likely to receive adequate screening than their younger, white and higher socioeconomic counterparts (p. 21).

However, Mandelblatt et al. (1993) suggest that access to and utilisation of health care services may be a better predictor of receiving cervical screening than race or social status.

This supports a recent New Zealand study which concluded that high household income was a good predictor of the likelihood of women having a smear (National Research Bureau, 1990). This view was reinforced by the Public Health Commission (1994) which also suggested women with low disposable income may not have the decision-making power concerning the family income and therefore may not be in a position to pay for a smear. In Adams' (1991) comprehensive analysis of the cervical screening research, she reports a lack of understanding in low SES women about cervical cancer and a need for more publicity about the test. She states that women who understand the function of screening and its relevance to them are more likely to participate. Targeting women with personal counselling, and informational and promotional material seems to be an effective strategy in the United Kingdom. Adams notes that different strategies may need to be used to reach different groups.

Conclusion

The literature review has given an outline of the knowledge gap hypothesis and explained how it can be used as a framework to explore communication with Pacific women about cervical screening. Different theories of communication have been explored from both a cross-cultural communication and public relations perspective. Finally, cervical cancer research and ways of currently providing information about cervical screening to Pacific women have been discussed.

The next chapter, the methodology chapter, will discuss the research design and research processes used to examine the nature of current communication with Pacific women about cervical screening. Procedures for selecting participants, data collection methods and data analysis are also outlined.

CHAPTER THREE: RESEARCH DESIGN, METHODOLOGY AND ANALYSIS

Introduction

This chapter will look at the setting for the study and the rationale behind selecting Pacific women in the Manawatu area as the subjects of research. It will then outline the research design, the research processes and discuss the ethical considerations of researching another culture separate to the researcher's. A rationale for using the snowball sampling technique is given and finally, the procedures for selecting participants, the data collection methods and data analysis are outlined.

Setting for the Study

The setting chosen for this study was the community of Pacific women in New Zealand. This was chosen, in part, to be a convenience sample and was also based on the assumption that this might enable some cautious extrapolation to migrants in other countries. Participants were selected for their location within the Manawatu area. It was decided to narrow the sample to one particular urban context due to the constraints of travel, cost and time. All Pacific women in the area were able to participate in the study regardless of whether they had already had a cervical smear or of their understanding of cervical screening. It was considered important to gain an insight into how women find out about health related information and how they like to have that information presented and conveyed to them regardless of their prior participation in cervical screening.

The study sought women at the ground level rather than community leaders or women currently involved in providing screening programmes. Even if some of the participants did not have an in-depth knowledge of cervical screening it was considered important

to explore how Pacific women's communication networks operate regarding sensitive health information. A further aim was to find out what some Pacific women's concerns are about accessing this information.

Research Design

The present study has used a qualitative approach which, in Patton's words, allows "the evaluator to study selected issues in depth and in detail (1990, p.13). He adds, "the advantage of a qualitative approach is that it produces a wealth of information about a much smaller number of people and cases. This reduces generalizability but increases understanding of the cases and situations studied" (p.14).

Such qualitative research, then, allows the researcher to explore more fully the significance of events, why things happen and people's reactions to them rather than the counting and measuring focus of quantitative research. Berg (1995) stresses the strength of the qualitative approach lies in being able to focus on the meanings individuals assign to experiences, which usually requires consideration of their perceptions and subjective understandings.

Qualitative research works from the foundation that people can be studied in the same way as inanimate objects can be. However, different tools are needed which do not rely on the predictive and prescriptive quantitative methodologies (Minichiello, Aroni, Timewell & Alexander, 1996). Using methods such as in-depth interviewing and participant observation allows the researcher to gain access to the participants in their daily lives. The participants' interpretation of their experience forms an important part of the research analysis. Patton (1990) believes this type of research allows the researcher to ask participants such questions as "How they view the program, what kinds of experiences they are having, and what they are doing" (p.190). Answers to such questions require detailed, in-depth, and holistic descriptions that represent people in their own terms and that get close enough to the situation being studied to understand first hand the measures of quality (Minichiello et al., 1996).

Research Processes

This research focuses entirely on the issues faced by Pacific women when accessing health related information. These issues are complex and are intricately tied to their cultural beliefs. The needs and issues relating to other ethnic groups in New Zealand are not discussed in the present study as it is important that separate research is carried out to identify and assess these different needs.

Minichiello et al. (1996) define interviewing as a way of accessing information. They state, "in-depth interviewing is a conversation with a specific purpose - a conversation between researcher and informant focusing on the informant's perception of self, life and experience, and expressed in his or her words" (p.61).

Since the present study focuses on communication and ways of reducing barriers, interviews were chosen as being an ideal research tool. They did not rely on the participants' written communication skills to the extent that questionnaires depend on a high level of literacy. Patton (1990) argues questionnaires are limited in some situations as they require effort on the part of the participant to fill in. This is especially the case in the instance of the present research, given the extreme sensitivity of the research topic in the eyes of the target group and the difficulties of language.

The information was obtained by using 20 face-to-face interviews. The interviews were semi-structured and in-depth to allow a full examination of the Pacific women's experiences and understandings. The interviews often evolved around the participants' experiences rather than strictly following the order and wording of questions.

The questions set out to explore the participants' ideas and to tap into their perceptions of current and future communication. As suggested by Minichiello et al. (1996), to ensure the interviews were responsive to the participants' discussion, the questions were used as a guide. They were developed around the issues central to the research question, and in the light of the research objectives. The questions covered such areas as communication networks used to access health information, the ways in which participants originally found out about cervical screening and barriers to

obtaining information about cervical screening. An outline of the questions used is included in Appendix 4.

Minichiello et al. (1996) believe the advantages of semi-structured interviews are that they allow for greater flexibility within the interview and have the potential for a more valid analysis of the participants' experiences. Patton (1990) also describes the advantage of semi-structured interviews in gaining the participants' perspective. He states that the nature of the interviews allows the researcher to gain a fuller understanding of the participants' experiences and probe into their use of communication networks and their rationale for choosing specific networks.

However, since the researcher is not able to directly view the participants' experiences first hand the situation or issue discussed is subject to interpretation and relies on the participants giving an accurate interpretation of their reality. Minichiello et al. (1996) explain this as "trying to interpret what the informant means as opposed to what he or she actually says" (p.73). This can be overcome by the interviewer confirming the transcript of the actual interview with the interviewee.

Ethical Considerations

It is important to approach a cross-cultural research topic with caution. When researching another culture, and not being a member of that culture, it is necessary to gain a thorough understanding of the implication of researching the topic before developing the research design. The researcher spent time talking with Pacific women and those involved in the Manawatu/Wanganui Cervical Screening Programme when designing the present study. This was necessary to ensure that the study was developed and carried out in a culturally appropriate way. Through these discussions it was decided that using a focus group approach would not be culturally appropriate as it would involve the women talking about a sensitive topic with their peers.

Sampling Techniques

The sensitive nature of the topic, cervical screening, and the lack of discussion about it in some cultures meant that the snowball sampling technique was one of the most appropriate selection methods available. This was preferable to using a random selection technique.

Snowball sampling or purposeful sampling allows "information rich" cases to be studied in depth (Patton, 1990).

> This approach involves using a group of informants with whom the researcher has made initial contact and asking them to put the researcher in touch with people in their networks, then asking those people to be informants and in turn asking them to put the researcher in touch with people in their networks and so on as long as they fit the criteria for the research project (Minichiello et al., 1996, p.161).

Patton states the snowball usually begins to get bigger as more names are accumulated and then consolidates as key names are mentioned repeatedly.

This approach aims to create an atmosphere of familiarity and trust when discussing a topic which may be sensitive and taboo in many cultures (Macdonald, 1992). It also allows the researcher to be introduced to the participants first by a friend without having to approach them cold about a sensitive topic.

Procedures for Selecting Participants

Pilot interviews were conducted with two Pacific women known to the researcher. These pilot interviews were used to analyse and develop the interview format following feedback from the participants. Specifically, the pilot interviews were used to evaluate the effectiveness and scope of the general questions asked, the way in which the questions were asked and how effective the questions were in promoting discussion. These interviews were used to ensure the questions and terminology used were culturally appropriate. This feedback formed the basis of the structure for the following 20 interviews.

Since the two Pacific women who participated in the pilot interviews were known to the researcher, this allowed the topic of cervical screening to be broached without having to first gain their trust and confidence. The two women are well known in the Pacific community and that allowed contact to be made with other possible participants.

Through the snowball technique the participants for the study were selected by using contacts of women in the Pacific community and possibly their friends or friends of friends. Information sheets were given to women in the Pacific community and other community networks. These women then approached other women about the study. Potential participants who decided to be involved then contacted the researcher directly or through the Pacific contact.

Before the interviewing began, the focus of the study was again discussed with participants and their rights were outlined. When participants indicated they were happy to be involved with the research they were given a consent form to sign. Permission was sought to record the interviews by tape recorder. None of the participants objected to the use of the tape recorder.

Data Collection Methods

Twenty face-to-face interviews were held with Pacific women. The interviews covered the participant's current knowledge of cervical screening, how she obtained that information, the barriers to understanding and how the communication processes could be improved.

The interviews were conducted at a location and time agreeable to both participant and researcher. Finding a mutually agreeable time was often difficult as most participants were occupied during the day and had other commitments out of work hours.

The interviews took place at a variety of locations. One took place at a participant's workplace after she had finished work at 7am. Because some participants had no

cars some of the interviews were conducted at their homes. Although this was a comfortable and familiar venue for the participant, the flow of the interview was often disturbed by children and background noise. The same applied to one conducted in a cafe.

In most cases the participant and the researcher were the only people present during the interview. There were three instances where children were present and one in which the husband was also at home.

Each interview was approximately one hour in length. Most of the interviews began with an informal chat about general topics relating to the participant over a cup of tea. At the conclusion of the interview there was often more discussion with the participant about cervical screening with questions directed at the researcher. These were answered and the participants often asked for a copy of some of the Pacific pamphlets in their Pacific language.

Data Analysis

The 20 interviews were each transcribed. A comprehensive transcription was provided, including pauses and any hesitations in speech. The researcher also independently took notes during each interview. Although this meant the researcher was writing during the interview, the notes proved invaluable for writing up the impressions of the interview as well giving the researcher an opportunity to identify early themes. Minichiello et al., (1996) comment that this technique can allow early analysis to take place but caution against making premature assumptions. They comment that data analysis and data collection occur simultaneously.

Minichiello et al., (1996) define data analysis as "the process of systematically arranging and presenting information in order to search for ideas" (p. 247). They describe this process as identifying common themes which link issues together that provide an insight and ground the analysis both in the participants' understandings and in theoretical translations of the findings. "Sampling can occur at any or all of the following levels: words, phrases, sentences, paragraphs, sections, chapters, books,

writers, ideological stance, subject topic, or similar topics relevant to the context" (Berg, 1995, p.178).

In the present study, a simple type of content analysis was used to analyse the transcripts. It was thematic in nature. This was considered an appropriate approach for answering the research question which required an analysis that was broad enough to take into account the interrelated nature of the research question. The study utilised a form of open coding suggested by Strauss (1987 cited in Berg, 1995). This form of coding takes the following four step approach. Firstly, the data is examined for a specific and consistent set of questions. Secondly, the data is analysed thoroughly. Thirdly, pauses are taken during coding to record ideas, concepts or categories trigged by the analysis. Finally, the relevance of SES variables to the research is not assumed until this is shown by the data.

Each interview question was approached and coded separately. The 20 transcripts were analysed firstly for general themes. Once key themes and issues were identified, these were then charted for each question. The transcripts were then analysed a second time to see if any trends relating to age, level of education and length of time in New Zealand were evident. Throughout this process quotes from the transcripts were identified that were decisive in describing the themes and issues. These are used to illustrate the participants' understanding of the identified themes and issues when discussing the results of the interviews.

The following results chapter will discuss the results of the content analysis using the interview topics as a general structure for the chapter.

CHAPTER FOUR: RESULTS

Introduction

This chapter will examine the information gained from the 20 interviews about how the participants obtain cervical screening information, the barriers to obtaining this information and how they believed communication should take place. Results are analysed for trends regarding the catagories of age, education and the length of time in New Zealand.

The chapter is structured into two sections. A participant profile is firstly given, outlining the different cultural, employment and income brackets of the women interviewed. The categories of age, education and the length of time in New Zealand, are used to establish any trends in the data and are detailed below. It was not possible to look for trends regarding the participants' level of income because half the sample were students and were generally on lower incomes despite being highly educated.

In the second section, the interview findings will be presented using the interview topics as a general structure of the section. For each topic area a brief outline of the interview question or questions asked will be given before the results are analysed. The interview questions are outlined in Appendix 4.

The following discussion chapter will examine in more detail the key trends highlighted in this chapter. It will look in particular at the communications networks used by the women for accessing health information and the suggested ways of promoting awareness about cervical screening.

Participant Profile

Twenty-one Pacific women, from Palmerston North, were interviewed using the question guide in Appendix 4. One of the interviews was not used as the participant had a leadership role in the Pacific community and had already had prior involvement with the cervical screening programme in the Manawatu/Wanganui area. It was felt that her views would not be representative of ordinary women in the community who had not been exposed to an extensive education on the benefits of cervical screening. Another interview was conducted to replace this one. A total of 20 interviews were used in the present study.

A range of women from the different Pacific cultures participated in the interviews. Seven women were Tongan, five Fijian, five Samoan, one Tokelauan, one Cook Island and one Papua New Guinean women. The sample included ten students and ten non-students. Eight of the non-students were at the time in paid employment, two were full time mothers. Four women were office workers, two were textile workers, one was a midwife and one was a caregiver.

Eleven women stated their family's income was $20,000 or under. This is not surprising as seven of these women were students and would not be expected to be on a high income while studying. The income of five women was between $21,000 and $40,000 and four non-student women stated the ir family's income was over $40,000. (Refer to Table 1).

TABLE 1
Characteristics of the Participants

Participant	Age	Ethnic Background	Length of time in NZ	Level of Education	Employment Status	Level of Income	Marital Status	No. of Children
20	20	Samoan	20	tertiary	student	< $20,000	unmarried	0
12	22	Samoan	4	tertiary	student	< $20,000	unmarried	0
15	25	Tongan	12	secondary	employed	$20 – 40,000	married	4
3	25	Tongan	3	tertiary	student	$20 – 40,000	unmarried	0
5	25	Samoan	25	tertiary	student	< $20,000	unmarried	0
16	25	Samoan	3mths	tertiary	student	< $20,000	unmarried	0
1	25	Tongan	9	tertiary	student	< $20,000	unmarried	1
7	32	Tongan	21	tertiary	mother	< $20,000	married	1
21	33	Tongan	13	secondary	employed	> $40,000	married	2
19	33	Samoan	33	tertiary	student	$20 – 40,000	unmarried	0
10	36	Tongan	15	tertiary	student	< $20,000	married	2
17	37	PNG	15mths	tertiary	student	< $20,000	widowed	2
4	38	Tongan	2	tertiary	student	$20 – 40,000	married	2
2	40	Fijian	20	secondary	employed	> $40,000	married	2
6	40 +	Fijian	12	tertiary	employed	> $40,000	married	3
14	40	European/Fijian	6mths	secondary	employed	< $20,000	married	4
18	44	Cook Is	18	secondary	employed	$20 – 40,000	married	4
8	45	Tokelauan	32	secondary	mother	> $40,000	married	2
13	50 +	Chinese/Fijian	32	primary	employed	< $20,000	married	4
11	53	Fijian	30	primary	employed	< $20,000	separated	7

Age

Seven women were aged 25 years or under. Six of these were students, six had an income of less than $25,000, six had university education, one was married and two had between one and four children. Four women had been in New Zealand less than ten years. (Refer to Table 1.)

Six women were aged between 30 and 39 years. Four of the six were students, three were earning less than $20,000 and two more $30,000. Five had further education, five were married and had one to two children. Two women had been in New Zealand for less than ten years.

Seven women were aged over 40 years. All were non-students, three were earning less than $20,000 and two more than $40,000. One had further education, five have been or are currently married with between two to seven children. One woman had been in New Zealand for less than ten years.

Length of Time in New Zealand

Six women had been in New Zealand for less than five years. Three of this group were aged 25 or under, five were students, five were earning less than $25,000, six have further education, three were married with children (Refer to Table 1).

Eleven women had lived in New Zealand for more than five years. Of these six were aged over 40 years, two were students, five were earning less than $20,000 and four over $41,000. Four women had further education, ten have been or are married and all the women have children.

Three women were born in New Zealand and had lived here all their lives. Two were aged 25 or under, all are students, two were earning less than $20,000 and one over $25,000. All three have further education, are not married and none have children. Seventeen women were born in Pacific countries.

In general, the New Zealand born women were not considered significantly different from the other Pacific women. However, one of the younger women did not appear to follow the general views of the other Pacific women about many of the issues raised in the interviews. She may not accurately reflect the views of most Pacific women but instead have a more European approach to the issues raised.

Level of Education

Further education is defined as being education beyond high school, and this includes university and polytechnic education. Twelve women had further education. Six of those women were aged 25 years or under, five were in their 30s and one was over 40 years. Ten were students, nine were earning less than $25,000, two over $30,000. Five have been or are currently married, six have one to three children and six have been in New Zealand for over six years. (Refer to Table 1)

Eight women had high school education only. All were non-students, six were aged over 40 years, three were earning less than $20,000 and three more than $41,000. All are married and have two to seven children. Seven had been in New Zealand for more than ten years.

Interview Findings

1. Understanding of Cervical Screening

To find out what the participants' level of understanding was about cervical screening they were asked to explain:

- if they were aware of the cervical screening programme before being approached about participating in the interview
- what they thought the purpose of cervical screening was
- how often should women have a smear
- where they could go to have a smear and
- what is the cost of having a smear.

1.1. Awareness of the Cervical Screening Programme

There appeared to be a very high level of awareness of the cervical screening programme with only three of the 20 women stating they were unsure if they had heard about the programme. The women who were aged 25 years or less and those who had been in New Zealand less than five years had lower levels of awareness compared with other women. Education was not a significant factor.

1.2. Understanding of the Purpose of Cervical Screening

The majority of the women appeared to have a reasonable knowledge of what cervical screening involved and were able to say it was a test for cancer. Knowledge levels about the purpose of cervical screening ranged from participants being aware a smear test was a way of checking the cervix for cancer through to some participants thinking it was a way to check the sexual organs for sexually transmitted diseases.

Women over 30 years of age and those who had lived in New Zealand for over five years had a high level of understanding about cervical screening. Two women, both in their 30s who had lived in New Zealand for around 30 years, were examples of women who demonstrated an indepth understanding of screening. They were able to give specific details about its purpose and what it involved:

> It is a kind of cancer women get in the cervix, in the womb ... They can test it through giving a woman a smear where they take cells from inside a woman, they scrape them off with a spatula. And women should have smears every three years just to make sure everything is OK, and they can detect the cervical cancer long before you ever get your system (Interview 8).

> All women especially at a certain age, even if you just had one sexual partner, should be screened for cancer of the cervix...She (*the nurse*) also said it was a good way to detect other things that happen in there like thrush, chlamydia and sexually transmitted diseases... You go to the dentist for your teeth ... so it's basically going to the doctor to have them check out down there to make sure that everything is all right... She said that scenario and that analogy which

> seems to me like OK sure I brush my teeth every day so why can't I go every now and then and have it checked out. It is not my teeth but you know what I mean (Interview 19).

Most women however, did not go into specific detail and just mentioned it was a test for cancer of the cervix omitting any reference to how the test was performed or naming the sexual organs. One woman also thought the test involved "cleaning the insides".

At the other end of the knowledge spectrum, five women were quite vague as to the purpose of the test. Women aged 25 years or under had little accurate knowledge about cervical screening. Those who had lived in New Zealand for less than five years also had less awareness compared with other women. A 25 year old student gave a response typical of this group:

> The only thing I know about it is where women have regular check ups something to do with their sexual organs (Interview 16).

1.3. Frequency of Smears

There was a wide variation in knowledge regarding the interval between having a smear. The women's responses ranged from having one every six months through to every three years. Only seven women gave the correct period of three years. More women in their 30s were able to give the correct interval compared with the younger women and those over 40 years. Women who had been in New Zealand for less than five years had the least amount of knowledge. A student in her 30s gave the precise answer when she stated:

> I think it's one once a year for the first time and then after that it's every three years (Interview 17).

The 13 women who were unable to give the correct period of three years gave varied responses ranging from every six months to every two years. Two women suggested age and number of sexual partners might affect the interval between smears.

1.4. Location of Smear Takers

Nineteen of the 20 women interviewed were aware they could have a smear at their doctor's clinic or at the hospital. Half of the students also mentioned Massey University Student Health as another venue. A 25 year old student explains the range of venues available:

> (*venues included*) a doctors, a health clinic, and a nurse, sexual advice centres and hospitals. Anywhere to do with health (Interview 5).

Ten women were aware they had alternative venues. Women who had been in New Zealand for less than five years were least likely to know there were other venues available. Other alternative venues suggested included the Women's Health Collective, the Family Planning Association and a Pacific Island clinic.

1.5. Cost

Assessing knowledge levels regarding the cost of having a smear was not applicable because of the wide variation in cost around Palmerston North. There are venues that do not charge a fixed price for a smear, just a donation. If women visit their doctor for the smear it is usual for them to pay the same fee for a consultation.

Half the women stated having a smear cost nothing. While some women stated the cost was the cost of a doctor's visit, others were not able to give any indication of cost.

2. Sensitivity of the Subject

The participants were asked if they felt finding information out about cervical screening was different from finding out about general health information. Examples of seeking information about glue ear or immunisation injections were used to illustrate general health information topics.

2.1. A "Taboo" Topic

Finding out about cervical screening and even discussing the subject were considered to be very different from finding out about other general health topics. All of the women, with one exception, agreed that Pacific women found cervical screening a difficult subject to discuss.

The most common theme expressed by the women was that cervical screening was a sensitive and private topic. Some of the women described the difficulty of discussing the topic in the following way:

> It is a very sensitive issue. Because in our culture...upbringing, you don't really ask about things like that, you know let's say for example you don't really talk about sex you know and things like that or even smear tests, you can't ask that to our parents (Interview 1).

> It is not easily spoken of, it is somewhat taboo and in the Fijian community that you do not speak or readily discuss. And if you are in pain or you are uncomfortable you forget it, but not wanting to pin point exactly where the pain is you sort of try and hide it rather than going to the doctor (Interview 2).

Ninety percent of the students and 70 percent of the non-students considered the topic to be a "big thing" and a "no no" to discuss. Sensitivity appeared to be related to age and length of time in New Zealand. All the women aged 25 years or under and five out of the six women who had been in New Zealand for less than five years found the topic sensitive. Level of education did not appear to be a strong predictor in this area.

Women expressed feelings of embarrassment, being scared or uncomfortable when discussing the topic. Two students, who had been in New Zealand for less than five years, stated:

> Yes, it is quite embarrassing because it is something that in our custom is taboo. It's sacred, it's you know, and only for certain people are you ready to expose yourself. I think it is you know sacred (Interview 4).

> Yes, I think it is a sensitive issue. It is parts of your body that you don't want to discuss in front of anyone else. I think it is to do with your upbringing as well. In the Pacific it is a taboo subject and you don't talk about this (Interview 16).

An office worker in her 40s gives the example of a friend who was too scared and embarrassed to go to her male GP with her gynaecological problem. When the friend finally went she did not explain to her doctor any of her real symptoms:

> ...they asked her all sorts of questions and she give all the wrong answers. She is too shy. I don't know if she was ashamed or shy or not wanting to break that barrier. Perhaps if the doctor was a female it would be much easier. In her case it was a female doctor that actually found out (Interview 2).

The four women who did not consider the topic to be sensitive were all aged over 30 years, earned under $20,000 and were married. Three had lived in New Zealand for over 15 years. Two had high school education only. The one woman not to express any hesitations about the sensitivity of the subject, believed that since "it was a health issue, it shouldn't be any different" to other health concerns (Interview 10). She was a student in her 30s who had lived in New Zealand for 15 years. This view was not supported by the three other women who said that although they themselves did not find the topic of cervical screening sensitive to discuss they were well aware other Pacific women may find it a difficult issue.

2.2. Confidentiality Concerns

Three women specifically raised the issue of confidentiality when going to visit a Pacific health professional. All of these women had lived in New Zealand for more than 20 years. These women expressed feeling uneasy with the thought of visiting a health professional from their culture because of the small size of the community. They considered their personal visit would become community news. One woman commented:

> I mean when you are saying that you know if I wanted to have it (*a smear*), I would go to a Tongan doctor, you know, I wouldn't feel safe going to them.

> Because the minute he walked out from the hospital you know he would start talking about stories about us (Interview 3).

Two of the students, aged 25 years or under, were particularly concerned about possible confidentiality lapses when visiting a health professional that may result in their families finding out they were being screened. A 25 year old student raised these concerns:

> Well if I walked into a clinic and there was a Polynesian woman working in the area I would be embarrassed to ask her for cervical information and that sort of thing. I would even be embarrassed to ask her about contraception if she looked Samoan...I think...the women would probably know my mum and she would probably blab on to someone else...where as I don't find it that embarrassing walking into a clinic and a European woman is there. I think it's a cultural thing (Interview 5).

2.3. Other Concerns

Three women aged over 40 years raised the idea that Pacific women tend to put the health of their families before their own. They stated that for some women it would have to be a serious health concern before she would visit the doctor. A student in her 20s who had been in New Zealand for nine years believed that it was only through going overseas that she had been exposed to modern thinking and subsequently cervical screening. She stated "culture creates a lack of understanding" (Interview 1).

3. Health Information Networks

To find out how participants accessed health information and what networks they would use to gain this information they were asked to describe how they found out about health issues and where they would go for information.

The ways in which the participants access health information had a number of similarities. All of the women stated they would prefer to use a face-to-face source as a way of accessing information.

The preferred way of accessing general health information was through a general practitioner (GP) or the Massey University Student Health Service. Talking with friends or gaining information indirectly through community groups and schools were also suggested. The media was also considered to be a good source of information. There was no strong preference for using the radio, newspaper or television. Face-to-face communication appeared to be preferred over written communication, with no clear preference expressed for written communication.

3.1. Face-To-Face Communication

Seventy-five percent of the women stated they would contact their GP, or use the free Massey University Student Health Service to access general health information. A young woman in her 20s, with four children, explained how the doctor's nurse was a good source of information. She said:

> she is really is a great lady. I can ask her you know things about my babies' injections and what I need to know, all sorts of things, sometimes I get seen by the doctor (Interview 15).

There appeared to be a link between how long the women had been in New Zealand and their preference for using face-to-face communication. All six women who had been in New Zealand for less than six years stated they would use such sources.

Not all of the students would automatically go to Massey University Student Health Service. A couple of the students expressed dissatisfaction with the service they had received. Four stated a preference to go to a GP.

Contacting the hospital for information was mentioned by seven of the 20 women. Some of these women also commented they were able to access written information from this source. There were no clear trends related to using this particular information source.

Other sources of face-to-face information included visiting health clinics, the Public Health Unit, the chemist, Plunket and talking with the District Nurse. The easy access

to health information from the health clinics in the city centre appealed to several of the women aged 25 or under. One woman commented:

> If I sort of needed like really wanted to know and I am in town I would walk past the clinic and go in there and get some information (Interview 5).

Using face-to-face information sources did not appeal to women over 40 years or women without further education.

3.2. Talking with Friends

Talking with friends was a preferred option to talking with family about health issues for 40 percent of the women. Only four women stated they would talk with their family and two of these women specifically mentioned talking with their Pakeha husbands. These women, both with high school education and employed as office workers, commented:

> Knowledge from books, knowledge from what I was taught in school, through people like *(name)* and of course part of it is from my husband, who has knowledge (Interview 2).

> Mainly from my husband, I just ask him. He is a Pakeha himself (Interview 21).

Talking with friends appeared to particularly appeal to women aged 25 years or under and those who had been in New Zealand for less than five years. Women over 40 years and those without further education did not support using this information source.

Six out of the ten students interviewed said they would discuss health issues with friends. Students appeared to favour this option compared with non-students. Only three of the non-students stated they would discuss health issues with their friends and two other non-students said they would talk to their work colleagues about health issues.

Most of the nine women, who commented they would talk to friends, defined friends as being female friends with whom they had a close relationship and could trust.

Many participants emphasised the friends must be close and female before information transfer would take place. One woman illustrated this point when she said:

> Yeah, friends. I'm embarrassed talking about *(health)*; I'm more comfortable talking with friends (Interview 16).

3.3. Community Networks

Links with community and ethnic groups were a source of information for five of the 20 women. Those who had been in New Zealand for longer than five years and who were over 30 years were more likely to use this source. Women who were 25 years or under and those who had been in New Zealand for less than five years did not mention community groups as a possible source of information.

One woman particularly described the usefulness of the Health Days organised by her Pacific community in providing information and health checks by Pacific nurses. She explains:

> We have a women's organisation for Pacific Island women ... the nurses, Pacific Island nurses, that are in the hospital...organise a health day for Pacific women, we have a day once a year... It is very important for Pacific Island women to come to listen to someone talking to them that understood their own language to speak to them about it (Interview 11).

3.4. School Networks

Three of the 14 women with children mentioned the school network as being a useful source of information. This was accessed through the children bringing home notices containing health information or sharing knowledge with their mothers after school about what they have just been taught. One mother, with two children, explains how the school informs them about health issues such as headlice:

> Sometimes the kids bring home notes that you know like something from school everyone could get infected (Interview 8).

3.5. Media Communication

Nearly all of the women mentioned the media as sources of information. The television was the preferred medium for seven of the women who gained health information from this source. Radio and newspapers were used by just over a quarter of the women. One woman used ethnic radio. Five women believed the newspaper to be a good source of information. However, this view was not universal with a few women specifically stating they would not use newspapers. A typical reply was:

> I don't read newspapers a hell of a lot because I just don't buy newspapers (Interview 11).

There were no clear trends regarding preference for the media relating to age, education or length of time in New Zealand.

3.6. Written Communication

Sources of written communication included pamphlets from GPs, health magazines, books, chemist handouts, Massey University noticeboards and posters on the back of toilet doors. Written communication was not a dominant information source. Women who had spent less than five years in New Zealand did not use this source.

However, one student in her 30s preferred to find out health information through her own reading:

> I try not to use doctors, simply because I think that if you think you are not well then you can make yourself not well...But read, yeah read and maybe health magazines or things like that and sometimes *Cosmopolitan* has quite interesting things in that (Interview 19).

4. Sources of Information about Cervical Screening

To explore the ways in which the participants had found out about cervical screening they were asked about how they had first gained their knowledge about cervical screening. They were specifically asked the following questions:

- who did they first receive information from
- what was their relationship to that person and how long had they known them
- where were they when they first received this information
- how long ago did they receive this information
- by what method did they receive this information - written/verbal.

There were four main ways in which the women gained their knowledge about cervical screening. Face-to-face communication was the most common way in which information was transferred. The three methods commonly used were: visiting the GP or hospital, a cultural group meeting and talking with friends. Using the media was the least common method of communication. Only three of the 20 women interviewed gained their knowledge via the media.

4.1. Visiting Health Professionals

Eleven of the 20 women interviewed initially found out about cervical screening during a visit to their doctor or medical specialist. Some of these women gained their knowledge during an antenatal appointment. Women who were over 40 and those who had lived in New Zealand for over five years were more likely to have found through medical visits.

Three of the 11 women were prompted to ask their doctor about cervical screening after seeing pamphlets in the waiting room. These pamphlets were all in English. Many of the 11 women felt these discussions with the doctor were informative and often resulted in them deciding to have a smear. A student in her 30s who had been

in New Zealand for two years commented on the need to prepare herself before having a smear:

> It was up to me to decide and I had. She *(the doctor)* wanted to do it right at that moment, but I said no I have to wait and you know I have to prepare myself and make sure in myself it is clean and everything else (Interview 4).

Gaining information from the doctor was often restricted to a verbal experience. Five of the 11 women were given written information to take away. The other six women would have preferred to have been given pamphlets as well as additional information to take away and read.

4.2. Talking with Friends

An office worker in her 40s was prompted to get checked out by a doctor when she spent time with a friend who was in hospital with cervical cancer, ten years ago. She explains how she initially gained her motivation to be informed from her friend:

> It was there that I thought "oh must do something about myself"...it took me a long time, another two years to get checked because I just didn't feel like it, they're not digging around in me, no thank you... I found a female doctor by the way (Interview 2).

Talking with close friends also prompted a young student, who had been in New Zealand for four years, to have a smear. Since her friends had arranged to have one at the same time, she decided to come along. She also gained more information from the health professional during the consultation before the smear.

4.3. Cultural Group Meetings

Four women gained their information primarily from medical professionals who were invited to speak at one of their regular cultural group meetings. These women had all been in New Zealand for longer than five years and were aged over 30 years. They all had a good understanding of cervical cancer and what the screening procedure

involved. The medical professional, usually a female Pacific nurse, spoke to the group and generally had pamphlets available. This mix of verbal and written communication appeared to appeal to the women. Most women did not know the medical professional before she came to speak and many felt this was an advantage as their confidentiality and anonymity was assured. These cultural groups often had the advantage of the women knowing each other before the meeting and feeling comfortable with their surroundings to ask questions which they would consider to be personal. One group, as a response to a talk, went together to the clinic to have their smears.

A woman in her 30s gives her impressions of a cultural meeting:

> ... very informal because it was a church hall, I remember distinctly, and of course no posters pinned up or anything. It was a small group and we just sat around talking and she just had this little briefcase and showed us and passed things round. When it initially started I think they went as a group to get their smears done, now I think everyone must just go by themselves (Interview 19).

4.4. Media Communication

The media was cited as the main source of information for only three women who gained their knowledge through the newspaper and television advertisements about cervical screening. All of these women were educated. None had subsequently talked about what they discovered with anybody else. One student, who had only been in New Zealand for three months, explained how she gained her knowledge from an article about a woman suing a hospital for not finding her cancer in time. She states it was difficult to get further information:

> ...after reading it I suddenly thought like, this could happen to me, but then the availability of information I found is quite limited, and you don't know where you go to get it. They are not clear on the procedures. It was very hard to get it and most people in Samoa do not know anything about it (Interview 16).

5. Sources of Additional Information about Cervical Screening

Participants had found out about cervical screening using specific networks. To find out how they would find out additional information the participants were asked to explain the information sources they would use. They were also asked if they would use the following sources:

- health professionals
- Pacific Island smear taker
- close friends
- family
- written information
- an 0800 information line
- any other sources.

Formal sources of information, such as visiting health professionals, were the preferred way for the women to access additional information. Seventeen women stated they would use this method. Informal sources, including friends and church contacts were suggested by exactly half the women. Eight women, however, specified they would not use informal sources. Written communication was suggested by six women. Most women said they would use a combination of the above communication sources.

5.1. Formal Communication

Formal communication included talking with the GPs, nurses, health clinics, hospital and women's health centre. These formal methods of communication were considered to be one of the key information sources by the women interviewed. Some of the women made a point of mentioning that they preferred talking to a female health

professional rather than a male one. They felt it was easier and more comfortable talking to a woman about female health issues.

5.1.1. Issues surrounding the use of the Pacific Island smear taker

All but one of the women did not realise it was an option to talk with a Pacific Island smear taker. Most women thought that they would use her as another source of information. Eleven of the women stated they would not feel comfortable going to her to have their smears taken. The main reasons expressed included the issues of maintaining confidentiality and the small size of the Pacific community which could mean meeting her at social gatherings.

Women aged 25 years or under and those who had been in New Zealand for less than five years had a much greater preference for only using the Pacific Island smear taker solely for the purpose of obtaining information. One 25 year old student, who had been in New Zealand for three months, highlighted the issues raised when she stated:

> Because it is the issue of confidentiality. You don't trust them, because it is a small country everyone knows the other and I might know someone there (Interview 16).

5.2. Informal Communication

Informal communication mainly consisted of talking with friends. Exactly half the women stated they would find out information from friends. Women who had lived in New Zealand for over five years and educated women were more likely to talk with friends compared with the other categories of women. A common theme again expressed was that the women would only talk to close female friends. One woman, a full-time mother in her mid 40s described this source of interaction as:

> We have a cup of tea and we talk about it. And some of the ladies they say it is a good thing and they know (Interview 8).

Talking to friends at work and using the church networks were also suggested as information sources.

Informal networks were not the preferred choice for eight women. Two women of this group commented they would not be comfortable accessing information from their families. Women who had been in New Zealand for less than five years and women who did not have further education were less likely to use informal networks. The common themes raised were the sensitivity of the topic and the difficulty in discussing the issues surrounding cervical screening. A caregiver in her 50s, who has lived in New Zealand for 30 years explained:

> I don't talk to friends about those sorts of things. Well you know, I have never talked to friends about it, but if someone has asked you know I would give out the information that I know. I don't think it is a topic that I would like to talk about with my friends. Maybe I'm a person who can't (Interview 11).

A younger woman, a textile worker in her mid 20s, without further education, described not wanting to talk to friends as she felt shy discussing the subject. She stated:

> Just a bit shy, plus I've got two sisters here and we all went through tests and I talk to them and they talk to me and I tell them what's scary about it, but I never talk to anyone else except my two sisters about it you know. Probably too shy to talk to other people (Interview 15).

5.3. 0800 Information Line

The possibility of using an 0800 information line as a way of accessing information was raised in the interviews. There was no clear agreement on the usefulness of this communication channel, with 10 out of the 20 women stating they would use it. Seven of the women who supported the concept were students. Women who were aged 25 years or under and those who had been in New Zealand for less than five years were more likely to support an 0800 number being established. The common themes expressed by women who liked the idea of a 0800 number were the issues of confidentiality, accessibility and ease of finding out health information and lack of

cost. One woman, an office worker in her early 30s who has lived in New Zealand for 13 years, commented:

> I suppose you are not face-to-face with that person. I can ask just about anything without holding back (Interview 21).

It is interesting to note that not having to use face-to-face communication, which appealed to the women supporting the 0800 number, was one the main reasons it did not gain the support of the women aged over 30. A textile worker in her 40s who had lived New Zealand for 18 years believes:

> I don't know maybe, because to me it is best to go in and see that person and she, the nurse, can explain it properly instead of me just ringing and talking, because it is just a machine. And you don't want to leave a message for a machine to talk to you (Interview 18).

Other common themes expressed by women who did not support using a toll free number, were their previous negative experiences with other 0800 numbers.

5.4. Written Communication

Six women stated they would use written communication sources. All of these women had further education, most had lived in New Zealand for over five years, and most were aged under 40 years. The written sources of information included leaflets from the chemist, books, Family Planning Association pamphlets and visiting the library.

6. Information Sources for Women new to New Zealand

To find out what information networks Pacific women who had recently arrived in New Zealand would use, the participants were asked they how they would access information about cervical screening if they were new to New Zealand.

There was a wide variation between the women interviewed as to how they would access information if they had recently arrived in New Zealand. The main information

networks suggested included talking with friends, talking with relatives and using the church networks. Many suggested a combination of information sources.

6.1. Talking with Friends

Talking with close friends was the main option suggested by 11of the women. The majority of this group were non-students. Talking to friends appealed to women aged 25 years and under and those over 40 years. Some women with no further education also supported talking with friends.

However, some other women stated quite strongly that they would not consider talking to friends. Most of these women were aged in their 30s. The response from a 25 year old student who has lived in New Zealand for three years is typical of this group of women:

> I don't talk to friends about that kind of thing (Interview 3).

6.2. Talking with Relatives

Talking with relatives was an option for six women although this was often not their first option. These women were distributed throughout the categories of age, length of time in New Zealand and education.

6.3. Church Networks

There were mixed opinions as to whether the church was a good source of information. Two students, the first of whom had lived in New Zealand for 32 years and the second who had lived in New Zealand just four, had diametrically opposed views:

> I probably wouldn't *(find out information)* if I was a Samoan woman recently arrived in New Zealand. So depending whether my family were liberal or not and let's say they weren't, I probably wouldn't find out from the people that were looking after me, I definitely wouldn't find out something like that from the church (Interview 19).

> Because Tongan people are very spiritual and very religious and majority of the people go to church, but not all go they would rather stay home and watch TV or stay home and do something in the house, unless they have women in that case they go to the community ... but first and foremost is church because people on Sunday go there ... plus weekly, they have church meetings ... sometimes you want to tell something to another woman, they would say ... "Oh on Sunday I will meet you outside and pass on the message" ... You don't only go to church but you pass *(on)* everything (Interview 4).

6.4. Other Information Sources

Other suggested information sources included visiting the doctor, a nurse of the same culture, the hospital, women's health clinic and finding out through the television or newspaper. Visiting a health professional was suggested as an option by four women without further education. A student in her 30s also mentioned that joining a cultural community group was an effective way of getting accurate information that hadn't been filtered. She states:

> if I joined up in a women's group maybe I would find out, possibly. They wouldn't talk about it in the youth groups, but if I joined a women's group I would probably find out (Interview 19).

7. The Effectiveness of Written Communication

Information about cervical screening has been produced in pamphlet and poster form by organisations including the Ministry of Health, Cervical Screening and the Public Health Commission. This information is usually available in health clinics where cervical screening is carried out. Participants were asked to give their opinions on four pamphlets which were available in Palmerston North. The pamphlets were all the small DLE size which is the equivalent to an A4 sheet of paper being folded into three sections. The pamphlets all used colour and were professionally produced. A description of the pamphlets used is given in Appendix 5.

Participants were asked to comment on what appealed to them about the pamphlets including their colour, layout and language used. It was not important if the women had or had not seen the pamphlets before as their general impressions were wanted rather than an indepth analysis.

All of the women except one liked the Pacific pamphlet, *Facts about Cervical Cancer*. Only six women specifically commented about the other three pamphlets they were shown.

Participants were also asked to comment on the written advertising on the back of supermarket dockets. These were aiming to encourage women to make sure their smear tests were current. This was being used in the main supermarkets in Palmerston North.

7.1. Effectiveness of the Pamphlets

The Pacific pamphlets had great appeal to the women. The women particularly commented on the colour, design and symbolism of the pamphlets. The hibiscus flower was especially liked, with many women commenting on how it reminded them of the Pacific. All of the six women who had been in New Zealand for five years or less expressed how they could relate to the symbolism. One student who had been in New Zealand for 15 months explained the links with the Pacific:

> ... because coconut for us is an everyday thing, like we use for food, smoking out fish, leaves for making our houses... and for hibiscus ... everyone knows hibiscus (Interview 17).

The question and answer format appealed to the women, as did the simple language. The women used words such as "straight forward", "simple", "eye catching" and "not complicated" when describing the presentation of the message in the pamphlet. Being able to read the information in their own language was considered to be important,

especially for understanding the medical terminology. A 25 year old textile worker, who had lived in New Zealand for 12 years, explained:

> It is hard when you can see at the doctors there is nothing in Tongan, so probably just looking at it when it is in Tongan you just pick it up and have a read... and even some big words you have in English and you think, but in Tongan you can read it and it is real clear (Interview 15).

A Fijian woman in her fifties also emphasised this point when she commented:

> I would be interested to know if there was one *(a pamphlet)* printed in Fijian. Yes, I haven't actually come across any ... actually written in Fijian, that really used to get to me because I would go to the doctors and that and all the pamphlets in there will be written in Maori, Tongan and Samoan and Chinese but they never ever wrote them in Fijian (Interview 11).

The length and actual size of the pamphlets was mentioned by some women. One particularly commented on the small size of the pamphlets saying they were easy to take away, carry around and give to other women.

The one woman who did not like the Pacific pamphlets was a 25 year old student who was New Zealand-born. She commented:

> Like why put flowers when they should make it more effective more like something that would really shock the women, like actually show the pictures of you know like a woman who has had an STD or what it looks like...they should make it more not happy faces but something like if you don't get a smear test this is what will happen ... rather than having hibiscus and coconuts, it looks like you are advertising an island (Interview 5).

The pamphlet, *Understanding Cervical Smear Test Results*, only appealed to three women. These women were all aged over 30 years, had lived in New Zealand for over five years and had no further education. They stated the pamphlet had more information that the others and gave a clear understanding of the issues. Although the other 17 women looked at the pamphlet they did not specifically comment on why it did not appeal to them.

The pamphlet *Have you had a Cervical Smear in the last 3 Years* appealed to three women who all had further education, were students and were generally aged under 25 years and had lived in New Zealand for less than five years. They commented on the pamphlet *Have you had a Cervical Smear in the last 3 Years* not emphasising cervical cancer as being solely a Pacific problem and not stereotyping against the Pacific culture. This feeling of being stereotyped was based on the advertisements run on television a while ago targeting Pacific and Maori women to have smears. They felt the message given was that cervical cancer was a Pacific and Maori problem. One of the students stated:

> ... a tendency for some Pacific Island women to feel and this is only what my friend said, like it is only a disease that only Maori and Pacific Islanders get because of some of the advertisements they used to run on TV (Interview 19).

A student in her 20s was the only one to comment about the Maori pamphlet. She was drawn to the pamphlet's description and diagram of the importance of being a woman. She believed this pamphlet highlighted and placed value on being a woman as well as providing information about cervical screening.

7.2. Supermarket Docket Advertising

Although only two women had previously seen the advertising about cervical screening on the back of the supermarket dockets nine women thought it was a good idea. This form of advertising had more impact with women aged 25 years or under and those who had been in New Zealand for less than five years. A caregiver in her 40s gave a typical response when shown the docket:

> Actually I have never seen that, mind you I never have time to, I just know that is my groceries. That is the first time I have seen that on that. I mean I have probably come across my bill thing, but I have never actually seen that... I know I save the McDonalds' ones (Interview 11).

The women who liked the docket advertising commented that it was a good way of promoting the message and served as a reminder. One woman in her 40s who had

been building up the courage to get a smear for many months viewed the docket as a good way of encouraging women to get a smear.

> Every time I get the docket you always get this and every time I read this remind me of my doctor... Yes, I think that is quite a good idea, but I always look for other people to go (Interview 8).

The concept of the docket did not generally appeal to women over 40 years. They did not think it was effective and often said they do not look at the back of the docket. A 38 year old student gave a typical response:

> Although I get this from the shop when I do my shopping ... I think it is because we don't have enough money, we don't have enough time to take note of these things. Although they are available, going to the shop you are going there with some money to buy what is necessary for you. With this one here it is an extra, you know (Interview 4).

8. Perceived Barriers to obtaining Cervical Screening Information and to having a Smear

To explore what the perceived barriers to seeking information and having a cervical smear were, the women interviewed were asked to explain what barriers they believed they faced. They were specifically asked if they faced barriers due to confidentiality issues, cultural background, embarrassment or other factors.

Cultural background, confidentiality and embarrassment were three main barriers expressed by the women interviewed. Cultural background was mentioned as a barrier by all but one woman. Most women said they faced a combination of barriers. Other barriers included religion, language, fear of the unknown, education and prioritising the family's health before their own.

8.1. Cultural Factors

Nineteen out of 20 of the women considered their cultural background to be a barrier. The only woman not to consider her cultural background to be a barrier was a caregiver

in her 50s who had lived in New Zealand for 30 years. She acknowledged that people of an older generation might feel differently.

The common theme expressed by all the women was the difficulty in discussing the topic of cervical screening and also that of sex. The word taboo was frequently associated with these topics. A mother in her 30s, who is also a university graduate, explains:

> I think that it is a major barrier. Because it is not something that you openly talk about... I mean anything associated with the body is not an open topic like it is in the European culture (Interview 7).

A 25 year old student who had been in New Zealand for three months commented:

> Because it is a open subject here, you know, you can talk about it over a cup of tea or lunch, and no one would mind what you are talking about... In Samoa, if you talk about it in front of them, you don't raise your voice; you don't want other people to know (Interview 16).

Discussing the topic with family posed a big problem for six of the students who were all 25 years or under. They explained that they could not broach this topic with their parents. It needed to be discussed in a discreet manner and would not be discussed in the presence of men. One 25 year student commented that many girls felt more comfortable discussing the topic with other women as they did not want their mothers to know. This was also due to sex not being a topic for discussion and the expectation of there being no sex before marriage. Added to this expectation is the strong religious teaching of the importance of virginity and the sin associated with pre-marital sex. A New Zealand-born student in her early 20s commented:

> I think if they knew that I went it would be all right, but they would be disappointed because we came from a Catholic family and you know, no sex before marriage as it goes (Interview 20).

The apparent link between having a smear and having had sex was a significant barrier for the younger women. A student in her early 30s gave an example of a friend who mentioned to her Samoan friends she was about to go and have a smear.

Her friends immediately judged her as having had sex and therefore, now being a bad person in their eyes. The student explained the dilemma:

> This is the '90s but it is still a very much a "if you have had smear test it means you must have had sex" you know what I mean. And if you have had sex that means you are a "bad girl". And if you are a "bad girl" that will mean God will punish you, it is the aura ... associated with that sort of thing (Interview 19).

One of the students who had been in New Zealand for 15 months felt embarrassment about the link people made between having a smear and also having a sexually transmitted disease (STD). She felt people would assume women had STDs if they were going to a clinic for a smear. This fear could in part reflect her own limited knowledge about the purpose of cervical screening and that of her peers. As stated earlier, it appears young women and those who had recently arrived in New Zealand had lower levels of understanding about cervical screening.

8.2. Religion

Religion was another theme that appeared to be a barrier. It was believed by a few women that religious beliefs could mean some women have a fatalistic trust in God to control their lives and do not think it is necessary to seek medical advice. One woman in her 30s, who has lived in New Zealand for two years, mentioned that the decision to see the doctor is based on cultural values. She stated that some women believed that if they trusted God the disease would not spread and if it did then it was God's will. She explained:

> ...my values could be that although I'm 41 and needs to be prevented, but I have faith in the Lord of my safe journey where I go. You know I might be saying you know my prayers will cure me, so there is no need for me to go forward, and ask for a miracle. So it is something personal, because of my values and sometimes you know some of the diseases are becoming critical then you do go and ask for help (Interview 4).

8.3. Confidentiality Concerns

Confidentiality was considered to be a barrier by three-quarters of the women. All of the seven women aged 25 years or under raised this as being a concern. Women without further education were also more likely to be concerned about confidentiality issues. These issues were less of a concern for women aged over 40 years.

One of the key reasons for confidentiality concerns was the perceived link between having had sex and having a smear. Since sex before marriage was culturally unacceptable it was important confidentiality was maintained to ensure families did not discover unmarried women had had a smear and conclude they had also had premarital sex.

Many women again raised the problems associated with going to see someone from their own culture to take the smear. They were concerned the health professional would talk to others about their visit and being a small community the chances of meeting the smear taker at a community function were considered to be quite high.

A 25 year old student, who has lived in New Zealand for nine years, explained the concerns raised:

> Because New Zealand doctors and people like that they ... know what confidential is, and they will have nothing to do with me in the future. If I had a Tongan there is a chance of having to see each other ... and say she had a test and she has got such and such and she has got this and that, because it is a cultural barrier. They have to gossip. So I wouldn't like to go to someone who is a Samoan or Tongan, because they would probably spread the word (Interview 1).

These concerns were mirrored by a 25 year old textile worker, who has lived in New Zealand for 12 years. She also stated:

> It's just feel uncomfortable you know. I don't feel comfortable with my own race looking at me. I just feel sort of uncomfortable. If we were just talking I would, but for a smear test I wouldn't (Interview 15).

8.4. Embarrassment Concerns

Embarrassment or shyness about the topic was expressed as being a barrier to 14 of the 20 women. These feelings were shared equally among students and non-students. Women aged 25 years and under, those aged over 40 years and those without further education were more likely to consider this to be a barrier.

The main concern expressed was the reluctance to expose part of the body which is not normally shown and the shame associated with doing this.

An office worker in her 40s, who had lived in New Zealand for 20 years, commented:

> You would be reluctant to expose yourself. It is easy for me to have my back checked or even my breast checked or you know, but not this part. It is really not (Interview 2).

8.5. Fear of the Unknown

The fear of the unknown was considered to be a barrier by five women of various backgrounds. Another five women also raised not understanding the English language as being a barrier. One woman in her 50s who had previously had cervical cancer explained the benefits of communicating in the same language:

> It is good to have communication with someone in their own language, in their own culture... Someone might have had it before they did and they might know someone that had, and they can benefit from that by talking about it. But I think it is good if they can talk to someone in their own language that they understood what is being said and what can be done to make the change, what can be achieved out of it to benefit Island women in general (Interview 11).

8.6. Education

Three women, all aged over 55, believed lack of education about cervical screening was another barrier. This was linked to literacy. If women could not read they would

often miss out on vital information. A student in her 30s, who has been in New Zealand for 15 months, stated:

> A lot of the ladies they are more or less illiterate, they cannot read ... so they are not likely to have access to this information, so the only way for them to know about the cervical screening is to be educated, to bring the information to them, educate them in a language they understand (Interview 17).

Education is also interwoven into cultural values. A textile worker in her 40s, who had lived in New Zealand for 18 years, explained that she was never taught about her sexuality and never knew how to protect herself but she believes children today learn a lot more from school. She commented:

> You know sex life and all this it has never been explained to us and when you are going to have your period ... it has never been explained because it is part of our culture (Interview 18).

8.7. Other Barriers

Other barriers mentioned by a few of the women included the cost of having a smear, finding the time and the accessibility of the venue. Two women who were both in their 40s, married with four children earning and under $20,000 mentioned putting the family's health first as being a barrier to caring for their own health.

9. Suggested ways of reaching Pacific Women about Cervical Screening

To find out what Pacific women considered to be the most effective ways of reaching other Pacific women about cervical screening the participants were asked to explain how they would reach other women. The women were prompted to discuss the following issues:

- the effectiveness of face-to-face communication
- using a Pacific or non-Pacific health professional to provide information
- ways of communicating the message: meetings, the media, the church
- holding different programmes for each culture.

Face-to-face communication was considered to be the most effective way of reaching Pacific women. Nineteen out of the 20 women interviewed suggested holding meetings with small groups of women with a health professional providing the information to the groups. There was no consensus as to whether the health professional should be a person from within or from outside the cultural group. However, 16 of the 20 women stated the professional must be able to speak the Pacific language being used or translation needed to be provided. The suggested ways of actually reaching the women to participate in the meetings were divided between using church networks and other community networks. Twelve of the women advocated using the church networks and six did not support the use of this network.

9.1. Face-To-Face Communication

The Pacific women interviewed were unanimous in their support for using face-to-face meetings as the key to reaching Pacific women. The only woman who did not advocate this method felt women would prefer to find out the information for themselves. This view may not be an accurate reflection as this particular woman was New Zealand-born and did not appear to subscribe to the general views held by the other Pacific women, as outlined earlier in the Participant Profile.

Nine women specifically mentioned the importance of using face-to-face communication for the topic of cervical screening. This preference was spread throughout the categories of age, length of time in New Zealand and education. The ability to ask questions and seek further information were seen as advantages of this method. A 25 year old student and 40 year old office worker explained the preference for this method:

> I think it is especially because it is quite a sensitive issue, and it can become quite emotional sometimes. Face-to-face is better, you can reach out and touch the other person, where as when you talk on the phone *(you don't have)* facial expressions, you know direct personal contact is important (Interview 16).

> I think sending out pamphlets and talking on the telephone, you don't know if they will get the pamphlets or get it and leave it on ... top of the shelf and it is not read you know. I think face-to-face would be a big help (Interview 14).

Holding workshops and seminars were also considered to be effective methods. A textile worker in her 40s had recently been to a week-long church conference in the Cook Islands, in which they devoted two days to discussing women's health issues. She believed this was very effective method as the women would go back to their churches and spread their knowledge with the other women.

9.2. The Communicator

Eighty percent of the women thought the person who spoke to the group needed to be knowledgeable and be able to communicate with the women in their own language or to have a translator available. All of the women without further education believed this to be a key requirement.

To ensure the speaker could be understood and would appreciate the cultural sensitivities, seven of the women suggested the speaker should be from the same culture as the group she is communicating with. A 33 year old office worker explained why this is considered necessary:

> I think I would have a meeting for any Pacific women, because you can speak in your own language without feeling left out from the others who cannot understand what you are talking about in your own language... I would probably get a Tongan nurse, because she can speak Tongan as well (Interview 21).

However, this view was not unanimous. Four of the women thought the person speaking to the group should be from outside their culture so that the women would

feel comfortable asking questions. One office worker in her 40s, who has lived in New Zealand for 20 years, explained their concerns:

> ...she is not ours and she will not be bias and she is white. That is not right but you know we do think of that sometimes. And she is trained and she knows more and also she is eligible. And also the lack of knowledge our own women have... meaning that if you start asking questions you have limited answers... So the best thing for our people would be for a Pakeha woman to speak to the small group (Interview 2).

These women acknowledged it would be useful to also have a woman present who was able to translate the questions and answers and especially to explain the medical terms.

One student in her 30s believed that having a separate person present, as well as a women from their culture, would encourage the women to ask questions, not just the leaders and the educated women. She stated:

> So what is needed is someone of the same race so that she will receive the questions from anyone of the women and also she will have the skills to direct questions to them. You know if a woman is older and shy ... and encourage and try to empower these people to talk and give the information. If she is giving it in English, some of the women might not be able to understand fully what has been said (Interview 4).

Although being able to communicate in the Pacific languages was a common theme, not all of the women perceived holding a meeting for each cultural group to be a necessity.

9.3. Using Community and Church Networks

The church and Pacific community groups were the two key ways suggested for actually reaching the women to inform them about the cervical screening awareness meeting.

The women who supported using the church networks were generally younger, aged 25 years or younger and had been in New Zealand for less than five years.

A common theme expressed by the women who supported using the church network was that it was the "only" and most logical way of reaching the Pacific women. The women believed this network would allow them access to the women in an appropriate way. A young mother and 21 year old student gave typical responses:

> I would probably go through the churches, through probably the Minister's wife, or through the president of a Samoan community, and I would take it through there especially going through a minister you can use the facilities that the church has, like the minister's wife gets all the ladies together because some of them have different kinds of groups ... that would be the most effective way (Interview 20).

> I think all the church congregation, and there is also different sorts of Tongan women's groups that they have here (Interview 7).

However, most women aged over 40 years did not support relying on the church networks to reach women. A common theme expressed was that the church had "old fashioned" ideas regarding sexuality. This was supported by a 22 year old student who said she would feel uncomfortable getting her information from within the church context as she felt sex before marriage was considered very bad and it would be assumed she was a "bad" woman if she was seeking this information while not being married.

A 33 year old student emphasised the sensitive nature of the topic and the need to approach with caution when using church networks:

> I wouldn't put it to a church; I would not approach the minister's wife... Simply because they are on that level the hierarchical thing and it is, depending on how liberal the minister's wife was you have to be very careful because they are still quite taboo subjects. And they will quite happily talk to you about violence and anger management and that sort of thing but they still cannot get into. I mean now that cancer is coming out a lot of people talk about

> cancer, but I said to her you can get cervical cancer as well and she said don't go there. Cancer is better if it is in the breast or the stomach, but it is still a very sensitive area (Interview 19).

9.4. Using the Media

Reaching women through the media was seen as being supplementary to holding meetings that relied on face-to-face communication. There were no common themes expressed by the women in the categories of age, length of time in New Zealand or education and no definite conclusions could be drawn.

The radio was suggested as a communication method by exactly half the women and television advertising by nine women. There was some debate as to the effectiveness of the newspaper, with six women recommending its use and three not supporting its effectiveness. Most of the women stated the use of any media was more effective in the Pacific languages. A full-time mother and a university graduate in her 30s commented about using the local Pacific radio programme to communicate:

> Yes, that is widely used actually, because through our radio access we have a slot which we have a health representative who speaks on the radio so that is another way (Interview 7).

The women commented that the approach of any media campaign needed to acknowledge the sensitive nature of cervical screening and not to embarrass the women by discussing the subject on the air at times when women may be around other people. A Tongan women in her 30s explains:

> It might be embarrassing for women for their issues to be over the radio... It has to be well presented in the language that is not going to embarrass women, if it has to be on the radio or on TV it has to be in line with the ... appropriate language, words that should be spoken each day. Because watching the TV we have our culture to listen to words that are sexual, especially in Tongan, but if it is English, because sometimes their English is not so good you know and they don't get the meaning that seriously that is, but saying it in Tongan, it has a deep meaning to assist the relationship (Interview 4).

It was also suggested that any advertising strategy should focus on promoting the availability of the screening service rather than suggesting women should have a cervical smear. This was thought to take the emphasis off cervical cancer being only a Pacific women's problem.

CHAPTER FIVE: DISCUSSION OF THE RESULTS

Introduction

This chapter will explore the results of the present study with regard to the current literature previously examined in the literature review. In the first section of this chapter the participants' knowledge of cervical screening will be examined with reference to the knowledge gap hypothesis and other knowledge gap research. The knowledge gap hypothesis places emphasis on socioeconomic status (SES) factors as being predictors of knowledge levels. SES factors were not evident as being strong knowledge indicators in the present study and the possible reasons for this are discussed.

The chapter will then look at the key barriers, expressed by the participants, to accessing information and to having a cervical smear. The communication channels used by the women and their preference for receiving information will be discussed. Finally, the cross-cultural implications and the communication approaches, suggested by the participants, for reaching Pacific women about cervical screening are examined.

1. Knowledge Gap Implications

Age and length of time in New Zealand appeared to be significant factors in indicating the level of understanding about cervical screening of the women interviewed. It is interesting to note that increased levels of education did not seem to point to increased knowledge.

Overall, women aged over 30 years appeared to have a greater understanding and comprehension of the purpose of cervical screening, the frequency of having a smear and venue options. Women who were aged 25 years or less and those who had been in New Zealand less than five years had the lowest levels of knowledge about cervical screening compared with other women.

These findings tend to support research by Peters, Bears and Thomas (1989) which highlighted a lack of knowledge about the recommended screening interval and also a lack of understanding about the preventative nature of cervical screening particularly in women who had not been screened before.

If the way in which the women interviewed access health information is examined in light of Tichenor, Donohue & Olien's original (1970) knowledge gap hypothesis, it is interesting to note the five factors which the theorists identify as contributing to widening knowledge gaps are relevant to the present study. Communication skills (especially the ability to speak English) and prior knowledge of cervical screening, social networks, the exposure to the topic and more importantly its acceptance all influenced the amount of knowledge held by the women interviewed. The media was not found to be a significant influence. In the present study, while these factors influenced the amount of the knowledge the women possessed, they were not necessarily related to SES factors.

The present study found knowledge gaps to be related to the type of topic or issue being discussed. Gaziano (1985) proposed that gaps occur when topics have more appeal to high SES individuals than to low SES individuals. This finding was not evident in the present study, as there were often universal gaps in knowledge as opposed to gaps just related to education levels. This was highlighted through the participants' knowledge about the recommended interval between cervical smears. There was a general lack of knowledge among the women which had no relationship to their level of education. However, the use of situational-specific differences to predict knowledge gaps would be valuable when applied to a sensitive topic such as cervical screening. Interest in the topic and the motivation to acquire information played a more significant role in determining knowledge gaps in this particular instance.

Contrary to Gaziano's (1983) research findings, the impact of the media, as an information source, was less pronounced in the lives of the Pacific women. The media tended to be viewed as a source of entertainment rather than of information, which supported Chatman and Pendleton's (1995) research.

The alternative models of the knowledge gap presented by Dervin (1980, 1989) and Chatman (1996) are very relevant when applied to the topic of cervical screening. The sensitive nature of the topic means that there were many factors involved in gaps of knowledge. Dervin (1980) stated that generally in communication campaigns the information rich prepare the communication message and automatically prepare a message that would meet their information needs. The only way for lower SES or the information poor overcome this situation is to become "culturally homogenized" to reach the communication fast lane. However, this is not necessarily appropriate or desirable when dealing with the topic of cervical screening, which needs to be approached sensitively and with cultural understanding. The women who need the information are unlikely to change their communication habits to become information rich. Also, increasing the information flow through traditional channels such as the media is unlikely to increase the knowledge of the women. It would be more successful, as Dervin (1989) suggests, to examine whether the current communication systems are effectively reaching the message receiver. In the present study it appears that, although there is information available about cervical screening, not all Pacific women are accessing or utilising this information.

Chatman's (1996) insider/outsider framework is also useful to apply to the present study. In this model, insiders share common cultural and social experiences and are unlikely to approach outsiders for information unless there is a trustworthy relationship bridging the two groups. In essence, information is linked to cultural and social norms. This framework can be applied to the case of Pacific women who are often reluctant to discuss the topic of cervical screening with each other without having to approach an outsider for information. In many cases the women interviewed initially found out about and/or would seek more information about cervical screening through their GP. It could be assumed this relationship is usually a trusting one is and termed by Chatman as being an information link between insiders and outsiders.

In terms of providing information to Pacific women, these models give a valuable insight into developing communication strategies which involve consultation with Pacific women in order to ensure the communication message being sent is presented

in an appropriate format for the women. The communication channels need to be built on trust to allow "outsiders" access to the world of the "insider".

2. Barriers to obtaining Information and to having a Cervical Smear

The sensitive and personal nature of cervical screening was a significant barrier for the women interviewed. Most of the women considered finding out about cervical screening to be very different from finding out about other health information. To overcome this barrier providers of cervical screening information need to approach the topic in a different way compared to providing other types of general health information.

Although there was almost universal agreement by the participants that the topic of cervical screening was sensitive to discuss, strong feelings of sensitivity appeared to be related to age and length of time in New Zealand. Young women and those who have been in New Zealand for less than five years do not appear to have been exposed to the topic of cervical screening and, therefore, find it much more difficult to discuss it compared with women who are already familiar with the topic. Level of education did not appear to be a strong indicator.

The research by Peters et al (1989), which groups communication barriers into six different categories, is particularly useful as it acknowledges the cognitive, emotional, economic, logistical and social barriers faced. Economic factors, language translation difficulties, lack of education and prioritising the family's health before their own were mentioned as barriers. The present study, however, identified emotional barriers as being the most significant faced by the women.

Cultural background, confidentiality and embarrassment were three main barriers expressed by the women interviewed. Not surprisingly cultural background was found to have a widespread influence on the ease in which the women felt they could access information. It was mentioned as a barrier by 19 of the 20 women. Most women said

they faced a combination of barriers. This finding corresponds with other research in this area which also identified Pacific women are faced with a variety of barriers (Ministry of Health, 1996; Peters et al., 1989; Public Health Commission, 1994).

It is interesting to note that religious beliefs and fear of the unknown were expressed as being barriers for some women. These barriers are not noted in the literature. Both the fatalistic belief of trust in God and the fear of doing something that is foreign and unknown was thought by the interviewees to act as a strong impediment to women having a smear.

It is suggested that the age of the doctor could be a potential barrier to women having a smear (Gifford, 1990). This finding was not supported in this research. None of the women mentioned this as being a consideration.

2.1. Cultural Background

Cultural concerns were often related to the inability to discuss the topic as it was considered to be related to sex and was therefore taboo. Also many of the women did not feel comfortable discussing a health issue which involved their sexual organs. It was easier to ignore the topic than to become informed. Most of the women found the topic of cervical screening very hard to broach and discuss with family or friends. These concerns were expressed by the majority of the women regardless of their age, education or length of time in New Zealand, and they were intertwined with concerns about confidentiality and feelings of embarrassment. It is therefore difficult for Pacific women to access information and even more difficult to have a cervical smear if it is not a topic that is openly discussed. When examining ways of raising their awareness, it is vital that this is taken into consideration.

2.2. Confidentiality Concerns

Confidentiality was considered to be a barrier by three-quarters of the women. However, it was more of a concern to women aged 25 years or under and those without further education. One of the key reasons for confidentiality concerns was the perceived link between having had sex and having a smear. Since sex before marriage was culturally unacceptable it was seen as important confidentiality was maintained to ensure families did not discover a woman had a smear and believe she had also had premarital sex. This supports Ma'ia'i's (1992) findings that Samoan women, in particular, are influenced by their cultural backgrounds which place a heavy emphasis on the importance of being a virgin before marriage.

Concerns about confidentiality also impacted on the women's perceptions of using the services of a Pacific Island smear taker. In the Manawatu/Wanganui area, MidCentral Health employed a Pacific Island smear taker in late 1996. Her role was to provide education to Pacific and immigrant women as well as free cervical smears at women's homes or at her home (New role for women's health, 1996). This is in line with the Public Health Commission's (1994) recommendations to increase the number of Pacific smear takers and educators. Using Pacific women as smear takers was not a concept supported by the women interviewed.

It was a surprising trend that the majority of the women were not aware that a Pacific Island smear taker existed. It was equally surprising that a number of women did not want to see someone from their own culture to take their smear. They were concerned a Pacific Island smear taker would talk to others about their visit and, being part of a small community, many considered the chances of meeting the smear taker at a community function were quite high. Many of the women did not like the thought of exposing a sacred part of their body to someone they might meet again especially during a social occasion. Gifford (1990) mirrors this same finding in her research of immigrant Australian women. This view was consistently expressed by the participants regardless of age, education or length of time in New Zealand.

However, most women felt comfortable visiting the Pacific smear taker for information and education. This was because it was relatively non-threatening and did not involve exposing part of the body. Women aged 25 years or under and those who had been in New Zealand for less than five years had a much greater preference for only using the Pacific Island Smear Taker for information.

2.3. Embarrassment Concerns

Embarrassment or shyness about the topic was commonly expressed as being a barrier by the women. These feelings were shared by women aged 25 years and under, those aged over 40 years and those without further education. This finding supports recent New Zealand research which also emphasised embarrassment as being a significant barrier (Ministry of Health, 1996; Public Health Commission, 1994). Embarrassment was also closely related to the taboo nature of topic and the implications of having a cervical smear which requires exposing a sacred and private part of the body.

3. Communication Channels

Effective promotion of cervical screening to Pacific women is usually described by three themes (Gifford, 1990; Macdonald, 1992: Ministry of Health, 1996; Ministry of Women's Affairs, 1989; Public Health Commission 1994). The first theme relates to communication channels and emphasises the importance of providing written and verbal information in the Pacific languages which is consistent with the Pacific culture. The second highlights the need for recognising each Pacific culture individually rather than collectively. The third stresses the need to acknowledge the different perceptions of health. The second and third themes will be discussed further on in this section.

The first theme, providing written and verbal information in the Pacific languages which is consistent with the Pacific culture, was supported in the present study. In particular the use of both formal and informal communication sources was consistent with Macdonald's (1992) research. Informal networks were often used for the dissemination of health information. Macdonald also found the church networks to

be a good way of conveying information. The effectiveness of this particular channel was debated by some of the women interviewed. This is discussed further when exploring suggested approaches for reaching Pacific women. Formal sources of information were often used to find out about cervical screening. When initially inquiring about cervical screening, the women, were not always satisfied with the amount of information they received. Many commented they would have preferred to also receive written information to take away with them.

There were similarities in the ways in which the women accessed general health information and information about cervical screening. Face-to-face communication was the preferred method of communication. Written communication was not strongly advocated in either setting, although when seeking further information about cervical screening some tertiary-educated women supported of using this source. Both formal communication through visiting a health professional and informal communication through talking with friends were usual ways of finding out health information.

3.1. General Health Information

A wide range of information sources were used to access general health information. As well as using a health professional, the women interviewed mentioned gaining information through community groups, schools and the media. The media was considered to be a good source of information for general health information although not for cervical screening information by nearly all the women. There were no strong preferences for any specific media type. However, there were trends relating to the preference for using different information sources by different groups of the women. For example, women who were over 30 years and had been in New Zealand for longer than five years were more likely to use community networks.

Talking with friends to find out information had particular appeal for young women and those who had been in New Zealand for less than five years, but not for women who were over 40 or those without further education. Students also had a greater

preference for using this source compared with non-students. It could be reasoned this was due to the age factor as six of the ten students were aged 25 years or under.

Using community and ethnic sources had strong appeal for women who were over 30 and who had been in New Zealand for longer than five years. As mentioned above, when discussing confidentiality issues, the ethnicity of the person providing the information is an important consideration for some women. Although not a universal finding, many participants commented they would prefer using a non-Pacific health professional as they felt more comfortable talking about intimate issues with someone from outside their culture.

3.2. Sources of Information about Cervical Screening

There were four main ways in which women initially found out about cervical screening. These were visiting a health professional, attending a cultural group meeting, talking with friends and, a source of lesser importance, gaining information from the media. Again, these different information sources were favoured by different groups of women.

Women who were over 40 years and those who had lived in New Zealand for over five years were more likely to have found out about cervical screening through their GP. The women who gained their information primarily from a medical professional talking to their cultural group had all been in New Zealand for longer than five years and were aged over 30 years. Talking with friends was more likely to appeal to younger women.

It is a significant finding that while most women initially found out about cervical screening via face-to-face communication they preferred to have this verbal information supplemented with written material to take away. Having written information, particularly in their own language, is imperative for enhancing understanding about the necessity and process of having a cervical smear. It also allows the women to re-examine the information at later time without having to remember exactly what the health professional said. Additionally, if the information

is available in their own language Pacific women can have access to a translation of the medical terms into familiar words and concepts.

Unlike accessing the general health information, in which the media was a key source of information, only three women used the media for cervical screening information. They were all tertiary-educated. This is a significant finding when considering appropriate ways of reaching women about cervical screening. Emphasis needs to be placed on other information channels, particularly those which use face-to-face communication, such as consultations with health professionals and holding meetings with the women.

3.3. Sources of Additional Information about Cervical Screening

Finding out additional information about cervical screening followed similar patterns to accessing general health information and initially finding out about cervical screening.

Visiting a health professional was the preferred source of information for the women interviewed. Informal communication, mainly consisting of talking with friends, was the next preferred source. A common theme expressed was that the women would only talk to close female friends. Women who had lived in New Zealand for over five years and tertiary-educated women were more likely to talk a broader range of friends compared with women who had been in New Zealand for less than five years and women who did not have further education.

Using informal communication networks, particularly talking with their families, was not the preferred option for women who had been in New Zealand for less than five years and for women who did not have tertiary education. This reluctance closely relates to the sensitivity of the topic and the appropriateness of discussing a taboo topic with other people.

Written information sources were advocated by the older more highly educated women who had lived in New Zealand for over five years. They specifically mentioned pamphlets and visiting the library as being information sources they would use.

There was not strong support for establishing an 0800 information number. Again this particular method of communication appealed to some of the women but not to others. Women who were aged 25 years or under and those who had been in New Zealand for less than five years were more likely support an 0800 number being established. The common reasons articulated by the women who liked the idea of a 0800 number were the issues of confidentiality, the accessibility and ease of finding out health information, and the free cost.

3.4. Information Sources for Women new to New Zealand

There was a wide variation between the women interviewed as to how they would access cervical screening information if they had recently arrived in New Zealand. Talking with close friends was the main option suggested. This particularly appealed to young women. In this instance women who had no further education were divided between to talking with friends and visiting a health professional.

Other options included talking with relatives and using the church networks. Using the church was also considered to be a poor information source by some women. These arguments are outlined below when considering ways of reaching the women about cervical screening.

These findings reflect, in general, the ways in which the participants who had been in New Zealand for less than five years found out about cervical screening information. The only difference being the greater acceptance of visiting a health professional.

3.5. Written Communication Sources

Of the four cervical screening pamphlets shown to the participants, the Pacific pamphlet, *Understanding Cervical Smear Test Results*, had the greatest appeal. Although the other three pamphlets were viewed by the women, support for this particular pamphlet was significant with 19 out of the 20 women expressing their support. Its Pacific flavour and simple language and layout were considered to be its effective

elements. Also, its availability in other Pacific languages was considered important by the participants for understanding medical terms.

The broad appeal of the Pacific pamphlet to the women interviewed reflected the finding in the literature that one of the most effective ways of promoting of cervical screening to Pacific women is to consult with them in the preparation of resources (Ministry of Women's Affairs, 1989). The present study also highlighted the Ministry of Health's (1996) research, which stressed the importance of developing resources, which are culturally appropriate and available in different languages.

Promoting cervical screening on the back of supermarket dockets did not have a universal appeal. This form of advertising had more impact with women aged 25 years or under and those who had been in New Zealand for less than five years. The concept of the docket did not generally appeal to the women over 40 years. However, it did act as a reminder to some women and if it is able to reach young women for example, who are less likely to use more conventional sources for their information, such as a GP, then it could be argued it is being effective.

4. Cross-Cultural Implications

The second theme, which emerged from the literature examining effective ways of promoting of cervical screening to Pacific women, was the importance of examining each Pacific Island culture individually rather than collectively. Although this was clearly outlined in the literature as being a significant issue, it was only articulated by a minority of the women interviewed. The women were more concerned that there was a means of translating information into their own language during any meeting or promotion. This confirms Coney's (1988) findings stressing the importance of providing information that is understandable and acceptable to the person requiring that information.

The third theme, regarding promoting cervical screening in the literature, stresses the need to acknowledge the different perceptions of health. This is highlighted in the present study, especially in the need to approach cervical screening with extreme

care and to acknowledge the sensitivity of the topic. Some of the women gave a strong message that they preferred a people-orientated approach rather than a problem-orientated one which emphasised that cervical cancer was a Pacific concern only. The lack of knowledge by some women about the preventative nature of cervical screening follows Ma'ia'i's (1992) finding that it cannot be assumed that all the women understand their reproductive systems as they are not encouraged to discuss these taboo topics.

Understanding the culturally shared attitudes about disease and about cervical screening and the barriers which prevent women from seeking information or having a smear are fundamental in ensuring false assumptions about Pacific women are not made (Doyal 1990; Gifford 1990; Hetch, Larkey & Johnson 1992; Peters et al., 1989). The identification of these barriers is an important step in the development of effective ways of communicating about cervical screening.

The model developed by Hetch et al., (1992) in which cross-cultural communication is divided into identifying the specific ethnic group, identifying their communication issues and developing conversational improvement strategies to promote communication satisfaction. This is particularly useful and can be applied to this study. It emphasises the importance of actually allowing ethnic groups to specify their communication needs in their cultural context. This is especially significant when communicating a potentially sensitive topic. There are dangers in developing a cross-cultural communications strategy without first understanding the cultural context in which communication will need to take place.

Their finding that cross-cultural communication is difficult and needs constant adjusting also needs to be taken into account. This can be interpreted as meaning that communication is an on-going fluid process and communication strategies need to be regularly reassessed to ensure they are still effective and relevant.

5. Suggested approaches to reaching Pacific Women about Cervical Screening

Face-to-face communication was considered by the women to be the most effective way of communicating with other Pacific women about cervical screening. The media was acknowledged as another method, but there were no universal conclusions as to what type of media campaign would be appropriate and successful. It was a significant finding that nearly all of the women thought holding a meeting for Pacific women was the best method for conveying the information. This corresponds with recent research involving Pacific women, which recommended using educational sessions and resources in Pacific languages (Department of Health, 1990; Public Health Commission et al., 1994).

The women interviewed suggested that a health professional should present this information during the meeting. There was not consensus over whether the health professional should be from the same cultural group they were communicating to or whether they should be from outside the group to ensure confidentiality. These opinions often reflected some of the women's perceptions that someone from outside their cultural group was needed to give knowledge without bias. It was suggested by many of the women that there should be fewer than ten women at each meeting to ensure the women would feel comfortable asking questions.

A common theme expressed by the women was the necessity of having a health professional who could speak their language or to have an interpreter present. The women believed this was essential for ensuring women with minimal English understood the medical terms and were able to ask questions. It is interesting to note that all of the women without further education believed this to be a key requirement. This may be because they are more acutely aware of the problems of not being able to understand English compared with tertiary educated women who are more exposed to both written and verbal English.

Using church and Pacific community networks were the two fundamental ways of informing the women about cervical screening meetings. There were opposing views as to the advantages of using church networks. It was an unexpected finding that generally the women who supported using the church networks were younger, and had been in New Zealand for less than five years. These women believed that the church networks were the best way to reach the women as it was perceived most women would go to church and be receptive to receiving information from this source.

The women who did not support the use of the church networks agreed that a lot of women went to church but questioned the appropriateness of this source due to the church's "old fashioned" ideas regarding sexuality. Most women aged over 40 years did not support relying on the church networks to reach women. They advocated using Pacific community networks, which they perceived as being less restrictive.

5.1. Integrating a Public Relations Communication Approach

Throughout the present study the results have constantly reiterated that the Pacific women prefer face-to-face communication. It is also becoming evident that different communication approaches are needed to reach the different groups of women who had differing levels of awareness. It would not be totally effective to just gather Pacific women together with a health professional and translator, if needed.

Before developing a communication strategy to reach Pacific women about the benefits of cervical screening, it is useful to reflect on Grunig and Hunt's (1983) classification of publics according to their level of awareness. They classify publics as being either a non-public, a latent public, an aware public or an active public. In general, Pacific women aged 25 years and under and those who are new to New Zealand could be termed latent publics as they do not appear to be aware they face a potential problem. They have different information needs compared with older women who are an aware public and have recognised that cervical cancer is a problem. This classification is useful for ensuring that the message is targeted to each group's specific needs and present situation as opposed to having a blanket approach for all Pacific women. Young women may need a more confidential venue to find out information and resources, which introduce them to the concept of cervical screening.

Older women, however, may need a focus that provides a greater depth of information. The present focus of the National Cervical Screening Programme is on encouraging older women to be regularly screened (National Cervical Screening Programme, 1990). This is seen as a priority as they have a lower screening rate. In terms of education it appears that older Pacific women generally have a good understanding about cervical screening but whether they are actually regularly screened is an area for further research.

The next step would be to develop a communications strategy to target the different groups of Pacific women according to their level of awareness and knowledge. This is, however, beyond the scope of this project but would be an area for further research and analysis.

CHAPTER SIX: CONCLUSIONS

Main Findings

1. The Knowledge Gap Hypothesis

The knowledge gap hypothesis places emphasis on socioeconomic factors (SES) as indicators of knowledge levels. The present study found that, unlike most other knowledge gap research, SES factors did not appear to be closely related to levels of understanding by Pacific women about cervical screening. The results from previous research would have suggested that women with lower educational levels had a corrspondingly lower level of knowledge. However, understanding was related to length of time in New Zealand and age. Women aged 25 years and under, and women who had been in New Zealand for less than five years had less knowledge about cervical screening compared with the other women interviewed.

In this particular stituation, when knowledge was related to a highly sensitive topic, cervical screening, SES factors were not evident as being strong indicators of knowledge levels. Knowledge gaps were related to the subject matter of cervical screening. The present study found that often overall gaps in knowledge existed, as opposed to just gaps directly relating to SES factors.

Interest in the topic and the motivation to acquire information about cervical screening were more indicative of knowledge gaps in this instance as opposed to SES factors. The factors which contributed to knowledge gaps appeared to be communication skills, especially the ability to understand English, prior knowledge of cervical screening, exposure to the topic and its cultural acceptability.

1.1. Media Implications

Unlike Tichenor, Donohue & Olien's (1970) original findings, the media was not found to be a significant influence in closing knowedge gaps about cervical screening. A salient reason for this lack of influence is that, contray to Gaziano's (1983) research, the impact of the media was less pronounced in the lives of Pacific women as an information source. This again relates to the highly culturally sensitive nature of the topic and the preference of the participants to access information about cervical screening via face-to-face communication.

1.2. Alternative Knowledge Gap Approaches

Alternative knowledge gap models presented by Dervin (1980, 1989) and Chatman (1996) provide a relevant framework which focuses on addressing ways of reaching the "information poor" or the "outsiders" by means of an appropriate format designed to meet their needs. These models provide a valuable insight into ways of developing communication strategies which involve consultation with Pacific women to ensure information is communicated in a culturally appropriate way. As Chatman states, communication channels need to be built on trust to allow "outsiders" access to the world of the "insider".

2. Barriers to obtaining Information and to having a Cervical Smear

The sensitive nature of cervical screening creates a barrier in itself. Sensitivity appeared to be linked to age and length of time in New Zealand but not to level of education. Obtaining information about cervical screening was considered to be different from accessing other types of health information due to the personal nature of the subject.

2.1. Cultural Concerns

Cultural background, issues of confidentiality and embarrassment were expressed as being the three main barriers facing the participants. Religious beliefs and the fear of the unknown were regarded as being barriers for some of the women. Although the

three main barriers are interrelated, cultural background was perceived to have a significant influence on the ease with which the women felt they could access health information. Cultural concerns were related to the taboo nature of discussing with anyone topics related to sex and the sexual organs. Nearly all the participants expressed these concerns regardless of their age, length of time in New Zealand or education. This means it is more difficult for Pacific women to find out information let alone even have a cervical smear if it is not a topic that is discussed, even amongst themselves.

2.2. Confidentiality Concerns

Concerns about confidentiality were raised by three-quarters of the participants. They were in part linked to the cultural expectation of no sex before marriage and the concern of unmarried women that their families should not know they were having a smear. Their concerns were also evident by the preference of many of the participants to having their smear taken by a smear taker who was not from their culture to ensure this person would not talk to others and that they would not meet socially. Most women would feel comfortable visiting a Pacific smear-taker for information and education.

2.3. Embarrassment Concerns

Women without tertiary education, those aged 25 years and under and those aged over 40 years considered embarrassment or shyness about cervical screening to be a significant barrier.

3. Effective Promotion of Cervical Screening

Three themes were identified in the literature relating to the effective promotion of cervical screening to Pacific women. The first theme relates to communication channels and emphasises the importance of providing written and verbal information which is in the Pacific languages, and consistent with the Pacific culture. The second theme highlights the need for recognising each Pacific culture individually rather

than collectively. The third theme stresses the need to acknowledge the different perceptions of health. The findings of the present study supported the first theme and the third theme, especially in regard to the need to understand both the culturally shared attitudes about cervical screening and the barriers faced by Pacific women. The participants in the study also emphasised their preference for a people-orientated approach rather than a problem-orientated one. The second theme was not supported by the study.

4. Sources of Information about Cervical Screening

The study showed that formal and informal communication channels were used by participants to access health information and cervical screening information. Face-to-face communication was the preferred source for finding out information about cervical screening. Visiting a health professional and talking with friends were the most common sources of information. Talking with friends to access information was consistently suggested by women aged 25 years and under.

The participants used a wide range of sources to access general health information, including gaining information from a health professional, community group, school, friends and the media.

Finding out about cervical screening and gaining additional information about the topic followed similar patterns to accessing general health information. Talking with a health professional or friends were the main sources of information used by the participants. The media were not significant sources of information for the participants.

Talking with close friends was the main way the participants thought they would access information if they had recently arrived in New Zealand. Other options included talking with relatives and using church networks.

Using written communication to find out about cervical screening was not strongly advocated except by older, tertiary-educated women who had been in New Zealand for over five years. However, many women commented on their preference for

receiving written communication as well as verbal communication when finding out about cervical screening .

In terms of written communication, the Pacific pamphlet, *Understanding Cervical Smear Test Results*, had the greatest appeal to the women interviewed. Its Pacific emphasis and its availability in the Pacific languages were considered important for ensuring understanding. Promoting cervical screening on the back of supermarket dockets only appealed to women aged 25 years or under and to women who had been in New Zealand for less than five years.

Face-to-face communication was considered by the participants as the most effective way of reaching Pacific women about cervical screening. Holding meetings with a health professional present was recommended by the women as the most appropriate and successful way of conveying the message. It was considered to be important that the health professional was able to speak the appropriate language or alternatively an interpreter should be present.

5. Suggested Approaches to reaching Pacific Women about Cervical Screening

Church and Pacific community networks were seen by the participants as the key ways of reaching Pacific women. Opposing views were expressed as to the appropriateness of using church networks due to the cultural expectations regarding the discussion of any matters of a sexual nature.

A communication strategy is needed to target Pacific women according to their existing awareness and knowledge about cervical screening. In general, Pacific women aged 25 years and under and those who have been in New Zealand for less than five years have different communication needs compared to older Pacific women who appear to have greater knowledge about cervical screening.

Limitations of the Study

The snowball sampling technique has limitations as women select their friends and it is not always possible to gain a wide representation of women. The informants must understand the worth of the study and also be respected in their community otherwise they are restricted in their ability to attract potential participants (Berg, 1995). Despite the limitations of the snowball sampling technique, the participants still had a wide variation in terms of age, education, cultural background and economic status.

Finding potential participants proved to be a challenging task. It took nearly five months to accumulate 20 usable interviews. Often the snowball technique did not gather speed as expected. Some potential networks were not forthcoming and no new contacts were established after the initial participant was involved. Others were much more successful and many participants followed the initial contact. The sensitivity of the subject may have discouraged women from talking to their friends and contacts about the research. The women who utilised their networks to find potential participants were often those who viewed cervical cancer as a real concern in the Pacific community and were keen to discuss it.

The women used for the interviews were pre-selected on the basis of being articulate in English. This narrowed the study to just those women who were able to speak English as well their own Pacific language. Consequently, the concerns and issues for non-English speaking women may not have been voiced. This would be an area for future research. In order to verify the results of the present study it would be ideal if a similar study was carried out by a Pacific researcher who was able to talk to non-English speaking women in the appropriate Pacific language.

It may have been a possible limitation that the researcher was from a different culture to that of the participants. This may have restricted how comfortable the participants felt during the interviews as they may have seen the researcher as being a non-Polynesian. However, this factor may have instead been an advantage since in general,

as the present study indicates, Pacifc women appear to be more comfortable talking with "trustworthy" people from outside their culture about intimate issues, such as cervical screening.

Directions for Further Research

The present study represents an analysis of the nature of current communication with Pacific women about cervical screening. It sought to identify the levels of current understanding about cervical screening and how that information was gained. It also examined barriers to obtaining that information and sought to explore ways of reaching Pacific women in a culturally appropriate way.

The present study is essentially exploratory in nature. Although there was no strong evidence presented to link SES factors to the knowledge levels of Pacific women, there is the potential for a future research project to approach a larger sample of Pacific women to re-examine the possibility of the existence of such links. A further study of this type would also allow the alternative knowledge gap theories to be tested more vigorously and follow up the weaknesses suggested by the present study.

Participant contact with health professionals was found to be a common way of both initially finding out about cervical screening and gaining more information. It would be interesting to find out if there was a relationship between the amount of contact with a health professional and the amount of knowledge about cervical screening Pacific women have.

There was discussion by the participants as to the appropriateness of using the church as a way of reaching Pacific women about cervical screening. Further exploration of this channel is needed to identify in more depth when it would be appropriate to use it and if the choice of topic affects the appropriateness of this channel. It would also be useful to examine the effectiveness of using this channel in reaching a wide range of Pacific women and to look at the characteristics of the women who are not involved in a church.

Practical Implications of the Study

One of the most significant findings of the present study is the preference for face-to-face communication for obtaining both general health information and cervical screening information. This preference is again highlighted when discussing ways of reaching Pacific women to provide information about cervical screening. There was almost complete agreement that holding meetings, with a health professional present, is the most effective way of reaching the women.

This finding has implications for the way in which a communication strategy to reach Pacific women is developed and in particular, which communication channels are emphasised. It does not appear that, generally, the print, radio or visual media are very effective ways of reaching the women due to the indirect nature of the communication and the sensitivity of the subject and their difficulty in discussing it openly. Cervical screening awareness campaigns, targeted at Pacific women, which rely on heavily on the media to communicate the message run the risk of significant social and economic consequences. The results of the present study suggest that scarce public health resources targeted to improve the health of Pacific women should not be directed at media advertising but would be better utilised in other areas.

A more effective focus would be to utilise and develop both community and church networks, as well as using health professionals to reach the women using face-to-face communication. Group meetings could also be used.

The second significant finding is that there appeared to be differences in knowledge relating to both length of time in New Zealand and age of the participants. As mentioned in the previous Discussion chapter, developing different communication strategies to take account of the differing knowledge levels and circumstances of young Pacific women and those who are new to New Zealand could be appropriate to ensure the information effectively targets its audience.

Conclusion

This is an original and exploratory study which sought to gain an understanding of Pacific women's perspectives of the nature of current communication and how they believe communication about cervical screening should take place to reach Pacific women in a culturally appropriate way.

The knowledge gap hypothesis and subsequent research provides a useful framework from which to examine and explore how Pacific women access information. Although the sensitive nature of the topic of cervical screening appeared to have a stronger influence on how knowledge was gained compared with SES factors, the knowledge gap hypothesis is a valuable theory to consider when developing information campaigns.

The lack of prior research in the area of communicating health information to Pacific women and the necessity of communicating effectively about cervical screening places greater emphasis on the importance of these findings. This also highlights the need to develop a subsequent body of research to ensure communication is effective, appropriate and not misdirected.

The present study signifies the importance of effective cross-cultural communication in a country such as New Zealand, which has an increasingly multicultural population. The provision of culturally appropriate information conveyed in a culturally acceptable way is essential to ensure that people have the opportunity to increase their knowledge, particularly where their personal health and well-being is at risk.

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APPENDIX ONE: INFORMATION SHEET FOR PROSPECTIVE PARTICIPANTS

Perceptions of the effectiveness of communication about Cervical Screening with Pacific women

Information Sheet

Hello, my name is Anna Jameson. I am a postgraduate student in the Department of Human Resource Management at Massey University, Palmerston North. I also work for the Communications Unit at MidCentral Health.

This study is being looked after (supervised) by Frank Sligo and Margie Comrie from the Department of Human Resource Management

What is this study about?

As part of my university studies I am researching how Pacific women find out about cervical screening. I am looking at the ways in which they get their information and the ways in which they would like to get information.

This study is also looking at how Pacific women can be reached to receive information about cervical screening in a way that meets their needs. I am planning to interview Pacific women to talk to them about these issues.

What would I have to do:

You are invited to talk with me about how you like to get information about cervical screening. The interview or talk will take about an hour. We can talk at a place of your choice. If you agree the interview will be recorded on a tape recorder.

If you choose to take part in the study:

- Taking part in this study will not affect the services you may currently, or in the future receive from the Wanganui/Manawatu Cervical Screening Programme.
- You can ask questions at any time about the study
- You can leave the study at any time
- You can refuse to answer any questions
- You can ask for the tape to be turned off at any time
- Your name will not be used in any way during this study
- You can get a copy of the findings of this study when it is finished.

If you would like to take part:

Contact Anna on:

Home: [redacted]
Work: [redacted]

For more information:

Please contact me [redacted] Frank Sligo may be contacted on [redacted] or Margie Comrie on [redacted]

Thank you for looking at this study.

APPENDIX TWO: CONSENT FORM TO PARTICIPATE IN THE RESEARCH PROJECT

Perceptions of the effectiveness of communication about Cervical Screening with Pacific women

Consent Form

- I have read the Information Sheet and have had the details of the study explained to me.
- My questions about the study have been answered.
- I understand that I may ask more questions at any time.
- I agree to take part in the study but I understand that I am able to leave the study at any time. I can choose to not answer any questions.
- I agree to give information to the researchers on the understanding that my name will not be used in any way during this study.
- I agree/don't agree to a tape recorder being used at the interview. I understand that I can ask for the tape recorder to be turned off at any time during the interview.
- I understand that I can get a copy of the research findings when it is finished.
- I agree to be involved in this study under the conditions talked about in the Information Sheet.

Signed:

Name:

Date:

APPENDIX THREE: REQUEST FORM FOR A SUMMARY OF THE RESEARCH FINDINGS

Perceptions of the effectiveness of communication about Cervical Screening with Pacific women

I would like to be sent a copy of the findings from the research study when it has been finished.

Please send the report to:

Name:

Address:

APPENDIX FOUR: INTERVIEW QUESTION GUIDE

1. How do you find out about health issues? Where do you go for information?

2. Is cervical screening different from finding out about general health information? For example:

   - glue ear
   - injections
   - hair lice
   - scabies.

   Please explain why or why not.

3. Have you heard about the cervical screening programme? Before (*name*) talked to you?

4. What do you know about cervical screening? What is the purpose of cervical screening?

5. How often do you need to have a smear?

6. Where can you go to have a smear?

7. Does it cost to have a smear?

8. How did you first find out about cervical screening?

   Who did you receive this information from:

   - name and relationship of that person
   - length of time you have known them
   - do you know where they got their information from.

9. Where were you when you first received this information? For example:

   - visiting friends
   - at the doctors
   - at church
   - at a social or cultural meeting
   - other place.

10. How long ago did you first receive this information?

11. By what method did you first receive this information?

    Written methods. For example:

    - posters
    - public health pamphlet
    - other pamphlet
    - book
    - letter
    - magazine (Women's Weekly, New Idea)
    - newspaper
    - cultural newsletter
    - notice boards
    - other methods.

Verbal/visual methods. For example:

- talking with a doctor
- talking with a nurse
- TV programme
- TV advert
- radio
- health meeting
- church meeting
- social/ cultural meeting
- other ways.

12. Who would you get cervical screening information from? For example:

- nurse
- doctor
- close friends
- family
- toll free information line
- written sources
- other ways.

13. What would stop you from seeking out information? For example:

- confidentiality
- cultural upbringing/background
- embarrassment
- other issues.

14. What do you think of these pamphlets/booklets?

- colour
- pictures
- layout
- words/language used
- other factors.

15. How should someone reach/communicate with Pacific women about cervical screening? For example:

- face-to-face with some from a Pacific culture
- face-to-face with some from a different culture
- pamphlets in Pacific languages
- holding meetings
- media - advertising on TV, radio, newspaper
- church
- other ways.

16. If you had recently come to New Zealand were would you get your information from? For example:

- relatives
- close friends
- doctor/nurse
- other ways.

17. What is your ethnic background?

- Tongan
- Samoan
- Nuiean
- Fijian
- Cook Islands
- Other.

18. How long have you been in New Zealand?

19. What is your age group?

20. What do you do for a living?

21. What is your level of income?

    - less than 20, 000
    - between 21, 000 and 25,000
    - between 26,000 and 30,000
    - between 30,000 and 40,000
    - over 41,000.

22. What is your level of formal education?

    - High school
    - certificate achievement
    - polytechnic
    - university.

23. Are you married?

24. How many children do you have?

APPENDIX FIVE: SAMPLES OF CERVICAL SCREENING PAMPHLETS

The pamphlets used in the interviews were:

- *Facts about Cervical Cancer* (1994) - produced by the Wellington Region Cervical Screening Programme and the Wellington Pacific Islands Cervical Screening Initiative. It is available in six Pacific languages as well as English. This pamphlet has strong Pacific symbolism throughout. It has a red hibiscus flower on the front and a traditional woven mat in the background. The pamphlet uses a question and answer format. It has plain English and has used a simple format with large text.

- *Understanding Cervical Smear Test Results* (1997) - produced by the National Cervical Screening Programme. This pamphlet is only available in English. It has a stylised picture of a kowhai on the front and inside. The pamphlet uses a question and answer type format and also uses headings to explain some terms. Although the language is largely kept simple, some medical words are used. It has used a simple format and large text. The layout gives the appearance of having a lot of text on the page.

- *Atawhaitia Te Wharetangata* (undated) - produced by the Ministry of Health and the Public Health Commission. This pamphlet is written in English and Maori. It uses a picture of a young and an old Maori woman sitting together on the cover. As well as using a question and answer format a diagram is used to explain the spirituality of Maori women. A simple layout is used and Maori explanations often included after the English terms.

- *Have you had a Cervical Smear in the last 3 Years: Women aged between 20 and 70 should have a regular cervical smear* (1993) - produced by the Ministry of Health and the Public Health Commission. This pamphlet is only available in English. The front cover has a colour photo of a group of women of various ages and cultures standing together. The pamphlet uses question type headings and has a flow chart in the middle explaining how the National Cervical Screening Register works. The pamphlet has a clear layout and uses simple language, avoiding the use of medical terminology.