A dirty determinant of health

What is the role of public health units in reducing the inequitable effects of inadequate income on health and wellbeing?

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ABSTRACT

This study examines the role regional public health units could play in contributing to reducing the inequitable effects inadequate income has on health and wellbeing. It also recommends appropriate steps for Wellington's Regional Public Health. It uses qualitative methods involving six group interviews with key informants from a range of public health units. From these it also examines current income-related work within public health units including views on: potential income-related interventions; how public health units could engage on these issues; and documentary analysis. These are supplemented by the six in-depth interviews with the senior people from the poverty and public health sectors. Their views and opinions on poverty, income and how public health units could address these issues were gauged and noted. Additionally, a literature review was undertaken to assess the strength of evidence of sub-national, income-related interventions both in New Zealand and internationally.

The research found that while the staff from the six public health units had a solid understanding of the importance of income in health, and that this has been captured in strategic planning documents, little action could be identified which addressed the situation. There was a consensus of opinion among the six that, for the most part, the solutions to inadequate income lay outside the health sector, but that health could play an important role in the collection, analysis and dissemination of evidence on income and health. The literature and the results from the interviews suggested that to address income, consideration must be given to the enablers and disablers of income generation.

Advocacy, evidence building and intersectoral action arose as key tools for public health units to use in income-related issues. However, significant concerns were raised about the perceived and actual limitations placed on public health unit advocacy.

The research concludes that public health units can play an important role in reducing the effects of inadequate income through the use of intersectoral collaboration and advocacy built on a strong evidence base by a highly trained and professional workforce. A series of recommendations around these key conclusions has also been made for Regional Public Health and other public health units.

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Disclaimer

The author of this research is both a student of the University of Otago and an employee of Regional Public Health, Hutt Valley District Health Board. The views expressed in this research do not necessarily reflect those of the university, the Regional Public Health or the Hutt Valley District Health Board.

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INTRODUCTION

This dissertation studies how income, and income related issues, are being addressed as public health issues within public health units in New Zealand. It considers which income-related interventions are currently being undertaken and what other interventions could be considered for public health unit action. Further, it draws together internationally published research and compares this with local action and explores what experts, within and outside public health units, considers as appropriate public health interventions to ensure all people have equal access to an adequate income.

The 100-year period from 1880 has seen an increasing focus on the biomedical model of health (Tesh, 1995). This was precipitated by a range of scientific developments involving our understanding of micro-organisms, infectious diseases and their transmission. As a result, the focus of 'health' was placed on disease and illness. Increasingly, over recent years, there has been a prominent movement in public health which has questioned the basis of this focus and which favours a greater holistic approach examining the drivers for good health ('determinants of health'). Evidence of this change first emerged in the late 1970s with the Declaration of Alma Ata (World Health Organization, 1978) and was reinforced by the Ottawa Charter (World Health Organization, 1986). This re-thinking of health saw the recent release of the report 'Closing the Gap in a Generation' from the World Health Organization's Commission on Social Determinants of Health who were charged with examining the underlying causes of ill health, the role societal differences play in health status and what actions should be taken to reduce these differences through changes to social structures, thereby reducing the inequalities in health outcomes (Commission on Social Determinants of Health, 2008).

The Commission used a broad lens when determining which factors affected health and describe them as "the unequal distribution of power, income, goods, and services, globally and nationally, the consequent unfairness in the immediate, visible circumstances of people's lives" (Marmot, Friel, Bell, Houweling, & Taylor, 2008, p 1690). This extended to include issues of access, the quality of education, health care services, employment, living conditions and exposure to unhealthy environments and

how they have been influenced by human activity resulting in certain populations and social groups having an uneven chance of healthy living and/or fulfilled lives (Commission on Social Determinants of Health, 2008). Individuals are unlikely to be able to directly control many of the determinants of health thus suggesting attention on societal factors rather than on the lifestyle factors of those affected (Solar & Irwin, 2006). These broad determinants encompass many of the factors leading to good or poor health.

To better understand why public health action on income is warranted it is important to consider the role of inequalities in health. There is firm evidence which shows that disparities in health outcomes by socio-economic status exist within New Zealand (Blakely, Fawcett, Atkinson, Tobias, & Cheung, 2005; Ministry of Health, 2002b) and that these have been demonstrated to have a negative effect on health outcomes for those at the lower end of the socio-economic scale (Blakely et al., 2005). Addressing these inequitable factors has become a priority for public health action around in New Zealand and internationally (Commission on Social Determinants of Health, 2008; Ministry of Health, 2000, 2002b). This action is often focussed on minimising the effects of poverty and ensuring that the social and physical supports are in place to allow those 'in poverty' to find a way out. Poverty exists within New Zealand and one key remedy of its effect is access to adequate income1. This will enable families and individuals the ability to provide for the necessities of life. Income is widely acknowledged as one of the fundamental determinants of health (Commission on Social Determinants of Health, 2008; Wagstaff, 2002; World Health Organization, 1986).

Inadequate income and poverty had been identified as issues of concern long before the Commission's reporting in 2008. The 1986 Ottawa Charter on Health Promotion identified nine key prerequisites 'determinants' of health: peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice and equity

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1 For the purposes of this research, income is defined as money received from: employment, goods or services traded or in the form of payments from other benefactors including government benefits.

(World Health Organization, 1986). Poverty has also been identified as a fundamental driver of poor health and was among the key drivers for the establishment of several of the world's trans-national agencies (United Nations, 1945; World Health Organization, 1946) while income was identified as one of the most important determinants of health (Marmot, 2002; Ministry of Health, 2000, 2002b; National Advisory Committee on Health and Disability, 1998; Wagstaff, 2002).

Public health approaches offer a range of tools which could effectively highlight and bring about changes to these determinants. The five health promotion action strategies suggested in the Ottawa Charter provide a good basis upon which this work can be taken forward (World Health Organization, 1986).

Social determinants of health are being seen as a fundamental part of a population health approach in New Zealand (Ministry of Health, 2000). Regional Public Health has responded to this by identifying income as a key area action and has established a work programme to begin addressing it (Regional Public Health, 2006). Subsequently, the regional strategic plan for population health in the Wellington region, developed by the Ministry of Health and the three district health boards, also identified a 'determinants of health' approach as being an important part of their strategy (Stephenson, Lane, & Field, 2008).

It is important to note that income is only one of a number of determinants that the evidence and literature suggests influences health and wellbeing. However, this research focuses more specifically on income and income-related interventions. This is due to its importance in providing the fundamental building blocks to ensure people have the resources to live long healthy lives within our society. It also provides an evidence base upon which interventions can be developed and acted upon by Regional Public Health, the public health unit for the greater Wellington region and public health units in general.

One of the objectives of this research was to develop and maintain a close relationship with Regional Public Health, thereby ensuring that the research outcomes were applicable to this organisation's needs. It was therefore a significant advantage that the author was also on staff at Regional Public Health and working in the area of social

determinants. This enabled a high level of knowledge sharing between the organisation, its staff and the researcher to provide research that was both academically sound and also relevant and useful to Regional Public Health.

Therefore, this research endeavours to answer the following questions:
• What is the role of public health units in reducing the inequitable effects of inadequate income on health and wellbeing? and
• What steps could Regional Public Health take to reducing the inequitable effects of inadequate income on health and wellbeing in their geographic area?

Overview of dissertation

This research reviews: The existing research and evidence on income-related intervention; It examines current understanding of, and activities to, address the issue of inadequate income within public health units in New Zealand; and it discusses and seeks the views of well placed public health and social science experts on the potential role for these public health units.

Chapter one of this dissertation provides a background to the issues discussed above. It explores the relationship between health outcomes and the social determinants of health with special consideration of income. The relationship between poverty and income are examined and income's role in measuring poverty is discussed. It also includes a brief outline of how public health units are placed within the current New Zealand health system and explored some of the key tools of public health action.

Chapter two provides a literature review of public health interventions targeting income, and the factors which enable – and disable – income generation. It considers literature from within New Zealand and internationally and seeks to identify relevant interventions for public health units.

Chapter three outlines the methodology of how this research has been conducted and the rationale for the methods employed. It discusses how the key informants were identified, recruited and interviewed and discusses the tools and methods used by the

researcher. This chapter also discusses the ethical consideration of this research and the processes used to ensure the confidentiality of key informants is retained.

Chapter four presents the results from the key informant interviews along with a documentary analysis. It draws together similar themes of discussion between them and highlights their areas of difference. The results examine commonalities and differences between the two different types of key informants (those working within public health units and public health experts who do not). It also considers the similarities and differences between the public health unit or district health board strategic plans to frontline action within the public health units.

Chapter five discussions the results and draws comparisons between the various findings and the literature review and considers the implications for public health units. It also discusses the strengths and weaknesses of this research, the opportunities for future research and the implication for policy and practise.

Chapter six presents the research conclusions.

Chapter seven makes a number of recommendations for Regional Public Health and other public health units as to how the information contained in this dissertation could be used.

CHAPTER ONE: BACKGROUND

This chapter will explore the significance of income as a social determinant of health and considers the relationship that it has to poverty as well as its use as an indicator of poverty. It will then provide a brief overview of public health units and their place within the New Zealand health system. Finally, there is a brief discussion and review of some key public health tools and the balance between their use and the public health units' role as a government agency.

Income as a determinant of health

While income is but one determinant of health, it has been suggested that it may be a better indicator of health status than any of the other determinants (P Howden-Chapman & O'Dea, 2000). It has been suggested that affluence is a strong predictor of health status as it affects access to healthy environments and living conditions, education, housing, and timely, effective health care and income itself (Robson, 2008). Careful consideration needs to be given to defining the causes of inadequate income. Only through identification and analysis of the problem can the underlying causes (and thereby solutions) be identified (M. Whitehead, 2007). This is further discussed in the literature review in Chapter Two.

A study by Benzeval and Judge found that even after controlling for initial health status, the association between income and health is still present (Benzeval & Judge, 2001). This suggests that there may be a relationship between low income and poor health. Having sufficient income is a fundamental prerequisite for health in developed nations. It is suggested that the lack of adequate income and resources leads to malnutrition, inadequate housing and overcrowding may lead to the increased risk of disease, inadequate home heating and / or damp conditions may lead to poorer health outcomes which in turn increases social isolation and stress and fosters the loss of community connectedness (Asher, 1999; Healy, 2004). While there is good evidence to suggest a link between income itself and health outcomes, there is debate over the extent and role that inequalities in income have within a society and their effect on health (P Howden-Chapman & O'Dea, 2000; Judge & Paterson, 2002; Mackenbach, 2002). Marmot notes that income inequalities have increased in many developed

countries and concludes that if policies are not put in place to address this (via tax and benefit systems) it will have a detrimental effect on health (Marmot, 2002). O'Dea and Howden-Chapman suggest that the distribution of income in a community affects health status (P Howden-Chapman & O'Dea, 2000). To support this argument they used an analysis of the rapid rise in income inequality in New Zealand between the early 1980s and late 1990s, concluding that it is likely that relative income has an effect on health outcomes independent of absolute income. This analysis was later challenged by Judge and Paterson as part of a 're-analysis' of the work done by O'Dea & Howden-Chapman (Judge & Paterson, 2002). Their re-analysis argues that the "relative effect of income inequality per se as a determinant of population health has been greatly exaggerated." and suggested that a life course[2] approach should be taken on any analysis of poverty and health (Judge & Paterson, 2002, p 52). This infers that to have any validity, an analysis of a person's whole of life experiences would need to be taken into account and not just their position at any given point in time.

Strong interdependence exists between different factors when it comes to discussing social determinants (Commission on Social Determinants of Health, 2008). For example; without education a person's employment opportunities are limited, therefore their income may be limited by their inability to work in well paid positions. The net result of this is that they will have limited access to healthy housing, potentially resulting in lower health status. People that are restricted from engaging in social and economic activities due to health problems have been shown to have a negative effect on their living standards (Jensen, Krishnan, Hodgson, Sathiyandra, & Templeton, 2006). Many of these support mechanisms have been identified in the United Nations Declaration on Human Rights (United Nations, 1948), and include such things as: insurance schemes or 'backstops' (health insurance, income protection, life insurance, etc), government social welfare services (unemployment benefits, sickness benefits etc), the provision of health services, affordable housing, educational opportunities for all and a safe and a secure environment (food, law, environment

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[2] A 'life course approach' considers the broader long-term effects of a given issue across the course of a person's life from conception to death and on how these effects manifest in a persons social and physical wellbeing (Ben-Shlomo & Kuh, 2002).

etc). Without adequate access to sufficient support system, people are likely to descend into poverty.

Health inequalities

Health inequalities have been defined as differences in health that are unnecessary, avoidable, unfair and unjust (Whitehead, 1992). Inequalities in health have been clearly demonstrated both internationally (Marmot, 2005; Woodward & Kawachi, 2000) and within New Zealand (Howden-Chapman & Tobias, 2000; Salmond, 1998) and have been identified as a major public health problem requiring urgent action (Ministry of Health, 2002b). Inequalities, for the most part, are avoidable and have developed as a result of societal action or inaction. Therefore the elimination of these inequalities also rests with society (World Health Organization, 2007), although the specific nature and evidence of some of these inequalities has been challenged by some (Judge & Paterson, 2002). If the argument that these inequalities have been caused by societal action is correct then logic dictates that it will be society who will need to act to address these inequalities. Ultimately this responsibility rests with the governments of nations to act to address inequalities.

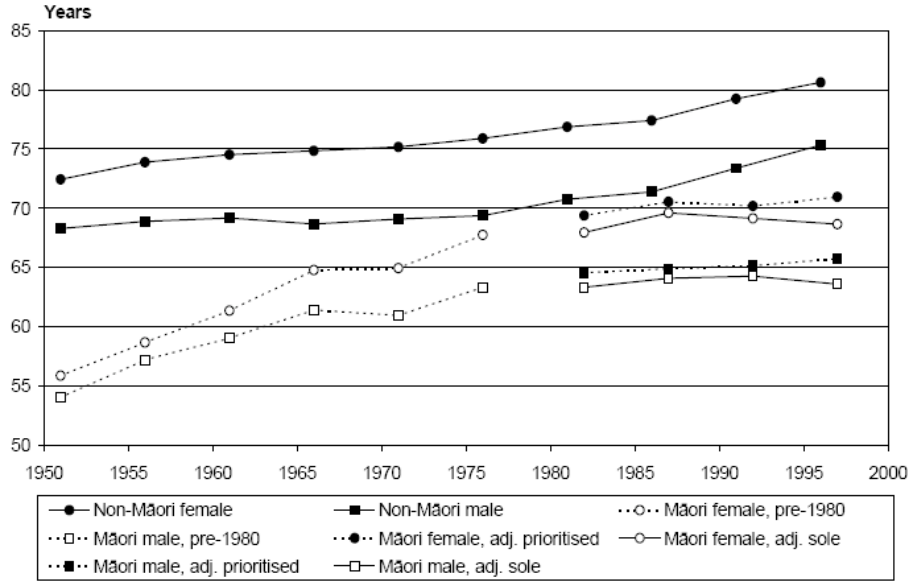
Graham suggested that there is a gradient on inequalities rather than a threshold at which inequalities take effect (Graham, 2004). Graham describes these gradients as the systematic relationship between socioeconomic position and health which are a result of "systematic differences in life chances, living standards and lifestyles associated with people's unequal positions in the socioeconomic hierarchy" (Graham, 2004, p 125). The gradient approach to inequalities demands action at all parts of the inequality spectrum, while ensuring that those worst off are not again left behind. However, the gradient approach does not appear to be universally accepted and Vallgarda observed that the idea of gradients seems to be giving way to a focus on the poor and disadvantaged within England (Vallgarda, 2008). While that latter approach of focusing on the most deprived is fundamentally important, it is important to also take into consideration those 'next in line' so as to ensure that they do not become the 'new' most deprived.

Given the prominence and central role of indigenous rights in New Zealand and the commitments made to Māori through the Treaty of Waitangi, it is appropriate that we specifically consider the inequalities faced by Māori. The Treaty of Waitangi is widely considered as New Zealand's founding document (Durie, 1998). Among other things the Treaty confers 'all rights and privileges of British citizens' to Māori. Inferred by this is the right to equal health status (Barrett & Connolly-Stone, 1998). Māori are often described as having inequitable health outcomes (Fawcett et al., 2002; Ministry of Health, 2000). Combined, these two points create a good argument for ensuring that any work targeted at improving people's access to adequate income takes due consideration of Māori. Analysis of the situation for Māori also provides a practical example of how inequalities affect both income and health.

Part of the explanation for why inequalities exist between Māori and non-Māori can be traced back to the early phase of European colonisation. At that time Māori were in a significantly different position than today, experiencing longer life expectancy than in the European immigrant population (King, 2003). However, over the intervening time, this position has been reversed due in part to political alienation, loss of power and the loss of self determination, racism but most of all the dispossession and loss of land (Reid, 2005; Robson, 2008). This has resulted in an inability to maintain wealth and to generate income. This has led Māori to have a greater reliance on salaries and wages as their primary source of income, making Māori vulnerable to changes in the labour market (Robson, 2008). In 1984 at Hui Taumata, Māori leaders predicted that the new Labour government's policies would make Māori the "shock absorbers of the economy" (Pomare et al., 1995). It is now becoming clear just how accurate this prediction was. While the life expectancy gap between Māori and non-Māori had been closing between the 1950s and the mid-1980s, this closing of the gap suddenly reversed from mid-1980 to the turn of the century, see *Figure 1*. It has been suggested that this change in life expectancy was due to the structural changes to New Zealand society during the period 1984-1999, such as the loss of many of the jobs Māori were employed in and therefore a reduction in income as they were forced to move on to unemployment benefits (Blakely, Ajwani, Robson, Tobias, & Bonne, 2004). Inequalities exist between Māori and non-Māori in health service delivery, health outcomes and in the factors that underpin health including household income, earning power for weekly wages and

other determinants of health (Blakely et al., 2004; Perry, 2007; Robson & Harris, 2007).

Figure 1: Māori and non-Māori life expectancy, by gender, 1950-2000



Source: (Blakely et al., 2004)

Poverty and income

Poverty reduction has been identified by many international bodies as a priority for international action (United Nations, 2000; World Bank & International Monetary Fund, 2004; World Health Organization, 2003). This call to action has been echoed within New Zealand in government strategies (Ministry of Health, 2000) and by non-governmental organisations and researchers (St John & Wynd, 2008; Waldegrave, Stephens, & King, 2003). Poverty has many different faces – from the starving child in Africa, to people living in the slums of large cities in third world countries, to our own impoverished communities in New Zealand. Many have attempted to identify, define and measure poverty so that progress can be quantified.

One widely used definition of poverty is the Townsend definition;

> *"Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in*

> *activities and have the living conditions and amenities which are customary, or at least widely encouraged or approved in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns, customs and activities"* (Townsend, 1979, p 39).

In this definition, the concept of poverty includes not only the basic necessities of life, such as food and shelter but also the importance of people's ability to engage in social interactions within their communities. Underpinning this argument is the importance of social connectedness and the extent to which individuals and families can become active members of society. Moreover it suggests that this social connectedness should be part of any comprehensive definition and therefore measures of poverty.

Another definition of poverty is that of the World Bank;

> *"Poverty is hunger. Poverty is lack of shelter. Poverty is being sick and not being able to see a doctor. Poverty is not having access to school and not knowing how to read. Poverty is not having a job, is fear for the future, living one day at a time. Poverty is losing a child to illness brought about by unclean water. Poverty is powerlessness, lack of representation and freedom"* (World Bank, 2008, accessed 20 August 2008).

The World Bank definition has a much stronger focus on the necessities of life and excludes many of the aspects of social inclusion and the societal context within which people live, which Townsend describes.

New Zealand has embraced a holistic model of health (Ministry of Health, 2000), drawing heavily from Māori models of health, such as Te Whare Tapa Wha (Durie, 1994), which encompass not only the physical aspects of health but extend to include the spiritual, mental, emotional, family and community aspects that form a holistic view of health (Ministry of Health, 2000, 2002a). Given this position it is appropriate to consider poverty in its broader sense in line with the sentiments of the Townsend definition. Regardless of the definition of poverty, there is widespread agreement

that to address poverty you must first measure poverty (Delamonica, Minujin, Davidziuk, & Gonzalez, 2006).

Perry describes three primary methods of measuring poverty (Perry, 2002) as:

- analysis of income levels
- a stock-take approach aimed at assessing outcomes or living standards using a survey methodology which investigates individuals, or
- a family's views of their own income and the consumption of goods, or social connectedness.

While the income analysis method needs to be used with caution (Marmot, 2005; Perry, 2002), it is acknowledged as the simplest and most practical method (Perry, 2004). Others argue that the risks in doing nothing while searching for the best solution ignores the potential harm being caused by doing nothing (St John and Wynd, 2008, Waldegrave et al., 2003).

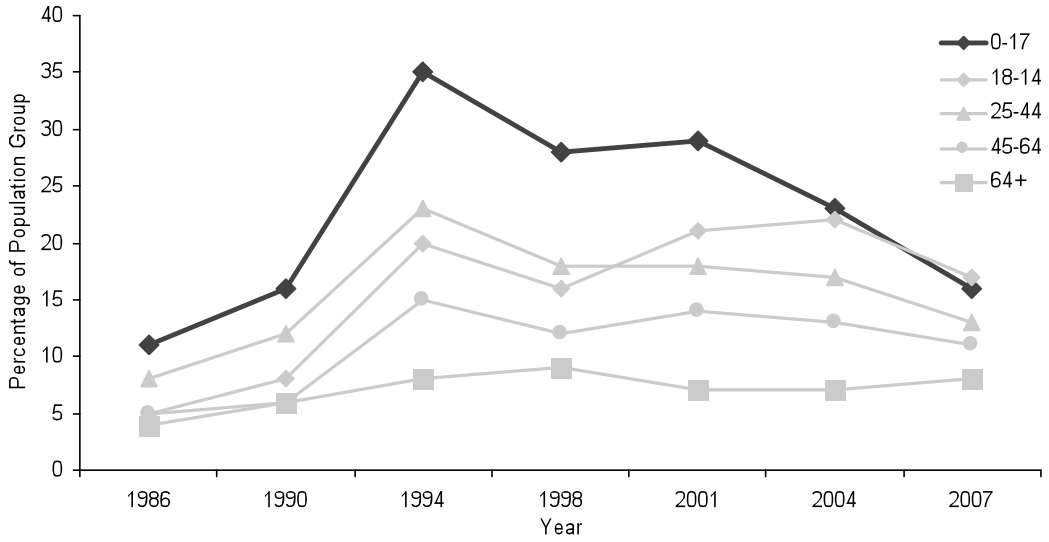
The New Zealand government has not defined poverty and therefore does not have a threshold upon which poverty can be measured. This lack of definition has seen successive governments face significant criticism from lobby groups, academics, public health experts and opposition politicians. There are calls for New Zealand to develop an official poverty measure and then set targets for the reduction of poverty (Public Health Advisory Committee, 2004; Sharples, 2008; St John & Wynd, 2008; Waldegrave et al., 2003). While no official poverty threshold has been defined in New Zealand, the Ministry of Social Development has established two 'low income thresholds', which they report on an annual basis (Ministry of Social Development, 2008). These thresholds have been set at 50% and 60% of after tax income less a 25% deduction for housing costs and equivalised for household size and composition. In setting these thresholds the Ministry of Social Development delicately avoids the use of terms such as 'poverty' or 'poverty line' (Ministry of Social Development, 2007). For the purposes of this research the term poverty line will refer to the 60% threshold, as defined by the Ministry of Social Development. This view is in line with several New Zealand commentators who argue for the introduction of a poverty level set at or near 60% of median, equivalent, disposable, household income (Public Health Advisory Committee, 2004; St John & Wynd, 2008; Waldegrave et al., 2003).

As income is used as the measure for poverty in New Zealand, the descriptions of poverty in fact describe the situation of those living on inadequate incomes. If, when considering poverty as measured by income, in terms of absolute numbers, then the evidence suggests that the largest group of people living on inadequate incomes in New Zealand are typically two-parent Pākehā families with children who draw their income from wages and own their own home with a mortgage (Easton, 2008). While this might provide some explanation of which sectors of the population have the largest numbers living on inadequate incomes, it does not sufficiently take into account issues of equity. On reflection we find that Māori and Pacific peoples, single parent families, children, and renters are disproportionally represented in the poverty statistics (Easton, 2008; Ministry of Social Development, 2007; Perry, 2008).

Children whose childhood poverty was long-term have been found to be more likely to be long-term poor as adults than children whose childhood poverty was transitory (Corcoran & Chaudry, 1997). This is especially concerning given that poverty is more prevalent among the young, with age appearing protective against poverty (Ministry of Social Development, 2008) and poverty has a disproportionate effect on children as they are more vulnerable to its adverse effects on their formative development (Minujin, Delamonica, Gonzalez, & Davidziuk, 2006). Age is considered to be a protective factor, especially for those over 65 years of age, due in part to a lower proportion of their income being used to pay for housing and their access to a universal benefit, the pension (Ministry of Social Development, 2008).

The Ministry of Social Development's Social Report uses a set of "statistical indicators to monitor trends [which] provide a picture of wellbeing and quality of life in New Zealand" (Ministry of Social Development, 2008, p 3). One such indicator is the number of people on low incomes, which is measured as 50% and 60 % of 1998 household disposable median income with 25% deducted to allow for average housing costs. In 2007, 13% of the population (~500,000 people) were living below the 60% threshold, down from 17% in 2004. The age distribution of the population living below the 60% threshold, shows that in 2007, 16% (~150,000) of children (0-17 years of age) live below this threshold compared with 13% and 11% for the 25-44 and 45-64 age groups respectively (Ministry of Social Development, 2008), see *Figure 2*.

Figure 2: Proportions of households with income below the 60% threshold, by age, 1986-2007



Source: Ministry of Social Development, 2008

The New Zealand health system and regional public health units

The structure of health systems is one of the most complex arrangements of a country. Understanding the health system of any country is often not a simple process and New Zealand's is no different. The section below does not attempt to explain this complex system but attempts to provide come context for those not familiar with district health boards and public health units.

The 21 district health boards were created out of the health reforms of the early 2000s. They were established as partially elected (majority) boards that are charged with promoting, protecting and maintaining the health of the population within their geographic areas (The New Zealand Government, 2000). Funding for the majority of district health board activities was also devolved to the boards to administer. However, the funding for the 12 public health units was not devolved and remains with the Ministry of Health. The public health units similarly have a responsibility for a geographic area often spanning district health board boundaries. Each public health unit is owned and governed by one district health board. As there are fewer public health units than district health boards, many of the public health units are contracted

by the Ministry of Health to deliver services on a regional basis. In effect, public health units have no legal entity and should be considered as simply another service arm of the district health boards. Public health units operate under the auspices of Ministry of Health contracts, which are determined from the Public Health Service Handbook (Ministry of Health, 2003b). These contracts are enacted within two important environments; one that public health units are part of the civil service and are thus expected to work within the constraints placed upon this service, and two that public health units operate within the political and structural environment of the district health boards. It is these constraints that add boundaries to the environment within which public health units can engage in public health.

Public health approaches

The term 'public health' encompasses a broad range of activities and has been defined as "the science and art of preventing disease, prolonging life and promoting health through the organised efforts and informed choices of society, organisations, public and private, communities and individuals" (Winslow, 1920, p 30). While the broad definition of public health is expansive and wide ranging, individual organisations are often charged with fulfilling only part of this scope. The constraints for public health units have been discussed in the previous section. Part of the approach to address public health issues is through the use of health promotion techniques (World Health Organization, 1986). Evidence on the effectiveness of health promotion interventions is often considered relatively weak due to a number of factors, which include the complex nature of much of the subject matter requires a reliance on qualitative research rather than experimental trial research (Asthana & Halliday, 2006; Rychetnik & Frommer, 2000). The difficulty in meeting classic, medical centric definitions of evidence, which usually places greater value on systematic reviews and quantitative research (including randomised control trials) ahead of observational or qualitative research (such as key informant interviews), has seen the development of a range of guides, methodologies and tools that provide greater rigour, strength and a clearer framework on which health promotion research and programmes are based.

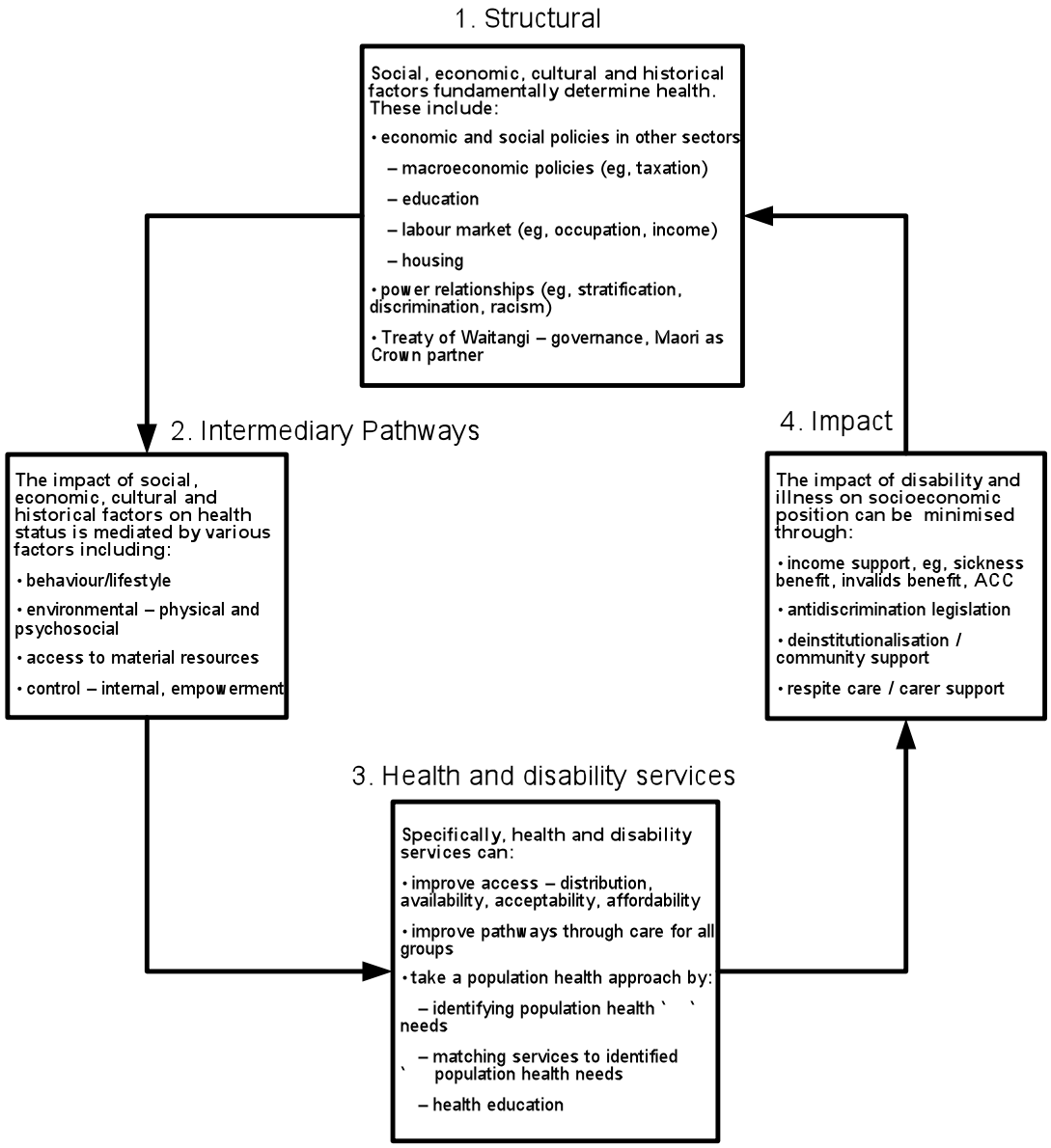
There is a growing argument that research that can address questions involving complex social interaction, such as assessing the impact of poverty reduction

strategies, should be given greater credibility within the classic research evidence hierarchy (Asthana & Halliday, 2006; Rychetnik, Frommer, Hawe, & Shiell, 2002). It is argued that for this to occur, greater consideration needs to be given to methods that go beyond the credibility of the evidence and extend to complexity, transferability and the ability of the research to detect all important effects of interventions (Rychetnik et al., 2002). While work on assessing, developing and strengthening the evidence base for health promotion programmes is occurring around the world (Barbor, Caetano, & Casswell, 2003; O'Dwyer, Baum, Kavanagh, & MacDougall, 2007), it is appropriate to consider some New Zealand specific models for this research.

The Ministry of Health published *Reducing Inequalities in Health* (Ministry of Health, 2002b) incorporating an intervention framework for the development and implementation of comprehensive strategies to improve health and reduce health inequalities, see *Table 1*. The framework categorises action into four general classes: structural, intermediary pathways, health and disability services, and impacts. These can be used in clinical planning and policy areas, locally, regionally or nationally and on a population or individual basis. The document recommends that programmes should be developed using interventions from a variety of levels in this framework.

A recent review and analysis of the intervention framework based primarily on work undertaken in 2004/05 found that while the tool has a "valuable role to play in the critical and challenging enterprise of reducing inequalities in health", it should not be seen as the total solution (Signal, 2008, p 182). Signal goes on to highlight the critical role of leadership, training and support within the health sector to broaden the use of these and other inequalities tools. While this review was published in 2008, it sources data from 2004/05, which was only three to four years after the initial publication of the framework. Given the limited timeframe between the framework's publication, the review of its effectiveness and lack of a more recent review of the framework's implementation and effectiveness, it is reasonable to suggest that its actual impact is still to be finally assessed. While the evidence on its effectiveness has not yet been analysed, there are indications that it will be a useful tool to help frame inequality intervention in New Zealand. It would be appropriate to use this framework to consider the results of the research.

Table 1: Intervention framework to improve health and reduce inequalities



Source: (Ministry of Health, 2002b)

Public health advocacy was one of three major strategies identified in the Ottawa Charter for health promotion: "health promotion action aims at making [fundamental conditions and resources for health] favourable through advocacy for health" (World Health Organization, 1986, p 1). Advocacy continues to be seen as a central tool for public health action (Beaglehole & Bonita, 2008). Changes affecting public health often require action by other organisations, and advocacy is employed in an attempt

to elicit this action. An early example of public health advocacy can be traced back to Edward Chadwick, who is considered one of the champions of the sanitary reforms in the United Kingdom during the mid 1800s. Chadwick authored a document known as 'The Sanitary Report' that advocated for the creation of laws to better protect health (Chadwick, 1842). This piece of work led to the introduction in the United Kingdom of the 1848 Public Health Act (Parliament of the United Kingdom, 11 & 12 Vict).

More recently, the New Zealand health sector was engaged in a debate around the appropriateness of government contracts including clauses requiring the contractor to advocate for particular health outcomes. This arose in parliament in 2003 with questions being raised regarding the clauses in non-governmental organisation contracts stipulating that they will 'lobby' (a form of advocacy) members of parliament for healthy outcomes in relation to the Smokefree Environments (Enhanced Protection) Amendment Bill (Ministry of Health, 2003a). As a result of this, the Ministry of Health commissioned a review of the existing contracts with non-governmental organisations and of its own contracting process. This was summarised by Hunn/Brazier in a report (Ministry of Health, 2003a). They concluded that for the Ministry of Health to maintain its neutrality, it should avoid contracting for any form of advocacy work from non-governmental organisations. After significant discussion and debate across the public health sector, the Ministry of Health concluded that their focus needed to be on how the Ministry conducted its business and not unnecessarily extending this requirement to non-governmental organisations, although they would cease to contract for 'advocacy' in favour of more specific evidence based information dissemination (Ministry of Health, 2003a).

Public health units are an arm of government and as such are restricted in the way in which they can advocate on health issues if the topic being advocated for or against is contrary to government policy or if the advocacy is directed at politicians (State Service Commission, 2005). The extent to which public health units, as government servants, can undertake advocacy coupled with the fact that public health units do not exist in their own right and are service arms of one or more district health boards, thus answerable to a locally elected board, creates a number of limitations on their ability to undertaken public health advocacy. These two factors combined may have

led to the units taking a precautionary approach to advocacy to mitigate potential organisational risk.

While there is much discussion regarding the appropriateness of government agencies engaging in advocacy with political leaders, there is less concern raised regarding advocacy between agencies or departments (Ministry of Health, 2003a). Advocating for issues that would see a positive public health benefit to other government departments and external agencies is seen as having less of a political risk, provided that this advocacy is evidence based and does not directly contradict government policy. In these situations, the promotion of debate on the issues and evidence is more appropriate. This suggests that public health units are well placed to promote debate on issues that have a well grounded evidence base and seek to have these issues debated.

Chapter summary

This chapter examined income as a social determinant of health and the effect of inadequate access to sufficient income on health. The relationship between inequalities and the social determinants of health with a specific focus on the role that income plays, was discussed. The impact of inadequate income on people's susceptible to poverty was highlighted, as was the importance that income has been given as a measure of poverty. This was explored using the New Zealand specific example of how Māori have fared since colonisation by the Europeans. Finally, the chapter concludes by touching on the New Zealand health system as it relates to public health and explores the use of some tools available to public health units including the use of and limitation on advocacy. The following chapter provides evidence to support the further investigation into some of the potential income-related poverty interventions available and to explore which of these would be applicable for a regional public health unit to incorporate into their programmes.

CHAPTER TWO: LITERATURE REVIEW

This chapter presents a review of literature on income-related interventions that will form an evidence base for Regional Public Health's income programme. The literature review includes discussion on the role of taxation and the different models of taxation and their impacts on poverty. The role and importance of social welfare systems and their effect on maintaining basic living conditions is also discussed along with some of the models of social welfare systems and their pros and cons. Also covered are the issues surrounding targeted and non-targeted benefits and the unequal delivery of full entitlement. Debt is examined as both a supplement to income and a drain on income and this is reflected in the current situation within New Zealand for those on low incomes. The role of education and employment and their significant income-enabling potential is discussed along with the dual benefit of early childhood education and care on both childhood development and on enabling parents to re-enter the workforce in order to increase their income.

Literature review: Income interventions

Relevant literature is identified using a planned search strategy that incorporates online literature databases, cites source review techniques, as discussed above, and through recommendations provided from colleagues, supervisors and key informants, as discussed in the methodology chapter.

TAXATION

Taxation is a system used almost universally as a means for governments to collect revenue from their constituent populations to support their aims and objectives. The underlying taxation system that a country adopts has by its very nature an effect on an individual's income. In essence the lower the tax 'take' the more individuals will receive in direct income. However, this in turn will reduce the ability for the government to deliver programmes that support their aims and objectives. The shape and method of taxation can have a significant effect on where the tax burden falls, i.e. which groups of people pay a greater or lesser proportion of the taxes. Policies that favour a more redistributive mechanism, whereby those most able pay more and

those least able pay less, have been found to have a beneficial outcome towards reducing inequalities and improving the overall health of the population (Benabou, 1996). The role that a government's taxation system has on poverty and inequality has been well documented (Acheson, 1998; Exworthy, Blane, & Marmot, 2003; Robalino & Warr, 2006). Taxation policy provides an opportunity to redistribute money from the wealthy to the poor, which is seen as an effective means of improving the health of the poor more than its detrimental effect on those with greater wealth (Marmot, 2002).

New Zealand operates one of the least redistributive taxation policies in the Organization for Economic Co-operation and Development (OECD) (Johnson, 2005). The acceptability of implementing more redistributive policies, however, is frequently challenged. The fourth Labour Government elected in 1984 made significant changes to tax law that resulted in a less progressive taxation base, whereby the number of income tax bands were reduced as were the size of the gaps between the bands, the marginal tax rate halved from 66% to 33%. The government also implemented a flat tax on most goods and services (know as Goods and Services Tax (GST)). This type of blanket tax is seen to effect all consumers equally. However, it is argued that the poor bear an unfair burden as a greater proportion of their disposable income goes to paying this type of tax (Pirttilä & Tuomala, 2004).

The intergenerational transmission of wealth is seen as extending the gap between the wealthy and the poor, and it has been suggested that reestablishment of inheritance taxes may reduce this inequality (Kunemund, Motel-Klingebiel, & Kohli, 2005). This view is shared by the New Zealand Public Health Association (New Zealand Public Health Association, 2002).

Changes to the taxation system offers one of the most powerful tools for increasing the amount that people on low incomes retain in disposable income. This is supported by strong evidence and firm logic. However, this is also an area that attracts strong political opinions and debate.

SOCIAL WELFARE

Closely aligned with taxation policy is the cluster of policies covering direct wealth redistribution, government benefits, rebates and tax credits which all serve as a means of redistributing wealth from the wealthy to the poor, through government mechanisms. Hoelscher describes this set of policies as 'cash benefits', distinct from 'in kind benefits' which refers more to goods and services. Cash benefits are seen as an integral part of a government's social policy framework (Delamonica et al., 2006; Hoelscher, 2004; Liebschutz, 1999). However, the methods of delivering this come under great scrutiny. There have been two dominant schools of thought on this in New Zealand – the first stemming from a social justice approach that seeks to ensure fairness, equality and a duty of care for all (Porter & Craig, 2004), and the other follows a neo-liberal approach that believes in self-reliance, individualism and personal responsibility (Morrow, 2001).

Targeted benefits (including means tested benefits) have the advantage of directing resources to those defined as most in need. However, the more a system attempts to target, the greater the likelihood is that those requiring assistance will be missed out and the more costly the system is to administer (Hoelscher, 2004). Provided uptake is uniform, universal benefits effectively reach all those in need but also capture those that are not in need of financial support. Universal benefits are simple to administer but lack finesse in directing assistance where it is most needed (Hoelscher, 2004). Liebschultz takes this further and suggests that a small country the size of New Zealand should consider reviewing its complex targeting systems in favour of a simpler, more (administratively) cost effective system of benefit support (Liebschutz, 1999). While these comments were published in 1999, anecdotal evidence suggests that a significant simplification of the system has not taken place to date. The introduction of the Working for Families tax credits (along with a strong economy with higher rates of employment and better wage rates) have seen income inequalities begin to narrow and have enabled a considerable number of working families to subsequently move out of poverty (Fletcher & Dwyer, 2008). The significance of Working for Families should not be underestimated. Before the introduction of Working for Families, "New Zealand was one of the least generous countries in the Organisation for Economic Co-operation and Development in its financial support for

children. Now approximately three-quarters of all families with dependent children receive some assistance" (Fletcher & Dwyer, 2008, p 4).

The concept of a 'universal basic benefit' has been mooted by several people in New Zealand (Liebschutz, 1999; Rankin, 1997). This benefit would provide all citizens with the necessary income to maintain their, and their family's, wellbeing. To fund this type of benefit, taxes would need to be increased. However, the concept has gained little traction nor generated significant debate in recent years (Liebschutz, 1999).

The problem of complexity of a social welfare system was highlighted in the United Kingdom recently when a House of Commons committee said that "elderly people should routinely be given advice on state financial benefits when they visit their general practitioner" in an attempt to improve benefit entitlement and as a result of the complexity of the current benefit entitlement system (Eaton, 2004, p 132). A study in the USA assessing the extent to which people using community mental health services receive their full welfare entitlement found that two-thirds were under-claiming and that this may have had a significant adverse effect on their quality of life and mental health (Frost-Gaskin, O'Kelly, Henderson, & Pacitti, 2003). Closer to home, a series of workshops focusing on health inequalities identified the need to change processes within district health boards to ensure that patients were receiving their full benefit entitlements (Signal et al., 2007). Documented studies on the extent to which those that are entitled to receive a benefit actually receive their full entitlement are few. One such report found that low levels of special benefits[3] were paid relative to estimated entitlement, with the "proportion varied hugely and unaccountably between Wellington Work and Income offices" (Howell, Simmers, & Hackwell, 2000). This report inspired a further detailed examination of the unequal practice of granting special benefits in New Zealand. In this work, Martin shows that the special benefit is not reaching those in need and is unevenly distributed. She also suggests that an increase to the basic benefit would be a better solution than improving the method of distributing the special benefit (Martin, 2004). St John also

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[3] Special benefits are third tier benefits intended to meet the needs of people experiencing financial hardship and are administered through Work and Income (Martin, 2004).

noted that while New Zealand has a number of social welfare 'backstops' there continues to be people who do not receive their full entitlement, thereby 'fall through the cracks' (St John & Wynd, 2008). It is also worthy to note that the number and range of local advisory and advocacy services present in Wellington is indicative of a need for support for beneficiaries and those becoming beneficiaries. A key role being to ensure that beneficiaries receive their full welfare entitlements (per. coms., Aspinall, 2008).

This section identified the important role that welfare systems play in the redistribution of wealth. There is solid evidence to support the role that social welfare systems play. However, the literature points to significant issues in the mechanisms and processes by which these systems are enacted, which can result in complex systems both for the administrators to implement and for the beneficiaries to access. This often results in the unequal receipt of these benefits by those who are eligible.

DEBT

The acquisition of debt can be used as a means of supplementing income in the short-term to finance expenditure. The longer-term consequences of debt can lead to a reduction in the level of disposable income. Thus debt is an important consideration in respect to income.

Debt levels among both poor countries and individuals have been highlighted as a barrier to poverty reduction (Lustig & Stern, 2000; Ministry of Consumer Affairs, 2006). On the macro level, sovereign country debt relief is seen as a significant part of international poverty reduction strategies (World Bank & International Monetary Fund, 2004). At an individual / household level, indebtedness and the serviceability of the debt are also important factors. While the analysis of the recent international credit crisis is far from complete, it almost certainly will have links to the secondary (sub-prime) lending market. 'Sub-prime' housing loan lending is often associated with borrowers that are considered 'high-risk' by primary lenders (Foote, Gerardi, Goette, & Willen, 2008). Similar to 'sub-prime' housing loan lenders are the fringe lenders (aka 'loan sharks' or 'payday loans'), who typically operate out of high street shops,

offering small loans at a high interest rate to people who may not be able to access loans from major banks due to their perceived risk levels. Fringe lenders offer an easy and ready source of money for those who have found themselves short, or for those that have faced life shocks such as a funeral or unplanned travel to be with family. These are a common feature of low income neighbourhoods (Ministry of Consumer Affairs, 2006). It is not uncommon for these lenders to charge high interest rates. Reports that show fringe lenders' interest rates of between 20-30% per month are common within New Zealand (Dale & Wynd, 2008). This leads to a cycle of debt that is often difficult to get out of especially for those on fixed incomes. Regardless of the type of lending, the costs of lending are important factors that may significantly impact on a household's disposable income. A US study by Stegman and Faris found that there is an increase in users of these services moving from occasional borrowers to chronic borrowers (Stegman & Faris, 2003), thereby making the cost of this borrowing an ongoing component of their lives.

Gift giving or remittances are a significant feature within some cultures, specifically within Pacific cultures, and are often seen as a cultural and familial obligation (Macpherson, 1994. as cited in Cowley et al. 2004; Mulitalo-Lauta, 2000). The Cowley study of Pacific mothers concluded that "the financial demands (of gifting and remittances) are multiple and complex, and are likely to affect the economic environment of Pacific families in New Zealand." More than half of the families surveyed faced some form of financial hardship as a result of gifting (Cowley, Paterson, & Williams, 2004, p 441).

This section highlighted the association between debt as a means of income supplementation and its effect on long-term disposable income levels. While New Zealand specific research on this connection is incomplete, there are suggestions that fringe lenders are exploiting vulnerabilities within the poorer communities in New Zealand – this alone warrants further investigation and review. Cultural commitments and obligations were also highlighted as having an impact on available income levels but again no evidence of any interventions was found.

EMPLOYMENT AND EMPLOYMENT CONDITIONS

Employment plays a significant role in enabling people to earn an income – it has also been found to be independently associated with better health (Marmot, Ryff, Bumpass, Shipley, & Marks, 1997). While there are many employed people that would be considered 'working poor'[4], employment is considered one of the strongest mitigators of poverty (Hoelscher, 2004). Employment status and the type of employment are considered to be important determinants of health. The literature strongly concurred that employment is an important determinant of health in its own right, but also as an important precursor to income generation. Apart from just providing financial security, good employment can provide protection from physical and psychological hazards, providing the employment is of good quality (Marmot & Wilkinson, 2006). The Commission on Social Determinants of Health recommended that governments set policies that ensure employment is secure and that a living wage is paid that is reflective of the current local cost of living (Commission on Social Determinants of Health, 2008). Employment is widely recognised, at least in Europe, as one of the best ways out of poverty (Hoelscher, 2004). This has been shown to be significant for both single and two parent families (Oxley, Dang, Förster, & Pellizzari, 2001).

There is a predominance of 'work first' policies in both Europe (Hoelscher, 2004) and New Zealand. The recent amendment to the New Zealand Social Security Act 1964 states that "paid employment offers the best opportunity for people to achieve … wellbeing" (The New Zealand Government, 2007, p 15). However, the 'work first' policy has a number of critics who argue that without a range of additional interventions, 'in-work' poverty may become problematic (Liebschutz, 1999; Sinfield & Pedersen, 2006; St John & Wynd, 2008). Concern has been raised about 'claw backs'[5] for those returning to the workforce (Fletcher & Dwyer, 2008; O'Brien, Wynd,

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[4] The term 'working poor' is used to describe people working on poverty level wages (Gleicher, D. & Stevans, 2005)

[5] The term 'claw back' is a commonly used term to describe a programme that reduces benefit entitlement as a person's income increases. .(Ministry of Social Development, www.msd.govt.nz, 2009).

& Humpage, 2008). Hoelscher cautions that the phasing out of benefits needs to be carefully considered to ensure that real increases in income are achieved when moving a family's source of income from a benefit to employment (Hoelscher, 2004). Universal benefits that are directed at children and recognise the number of children in a household have been shown to be effective for the working poor as they smooth the transition into work, thereby providing a 'benefit cushion' during the transition period (Oxley et al., 2001). The effectiveness of 'in-work' tax credit systems, which aim to encourage work and supplement incomes for beneficiaries and among low-income families, have had mixed results. In Britain, the employment rate of single mothers has increased following the introduction of in-work tax credits, although this was found to be more likely linked to childcare support (Francesconi & Van der Klaauw, 2007). A similar childcare subsidy scheme was introduced in New Zealand in 2007, although it is probably too early to assess its impacts.

New Zealand first enacted legislation defining a minimum wage in 1983. The establishment of and rate at which a minimum wage is set is a hotly debated subject. Exponents argue that a minimum wage policy ensures that low income workers earn a sufficient living wage, and that they are protected, to some degree, from exploitation (Card & Krueger, 1994; Chapple, 1997). Detractors point to negative effects on job opportunities and a reduction in the ability of school leavers to gain employment (Neumark & Wascher, 1995, 2000). A study by Hyslop and Stillman on the effect of the 2001 reforms to the minimum wage affecting youth workers in New Zealand found "no robust evidence of adverse effects on youth employment or hours worked" (Hyslop & Stillman, 2004, p 2). On the contrary, they found stronger evidence of positive effects on employment. Moreover, Freeman concludes that on balance, minimum wage policies have the potential to do more good than harm, in part due to their redistributive effect on income and limiting the tide of rising earnings inequalities (Freeman, 1996).

Women continue to lag behind men both in terms of same pay for same work and also in terms of job opportunities within the workforce (Manning & Petrongolo, 2008; Warren, Rowlingson, & Whyley, 2001). Warren concludes that even with the greater rate of participation in the British labour market, women have fewer chances to build up a safety net of saving which may lead to increased levels of poverty in the event of

life shocks or during retirement. The issue of women's income in retirement is especially important as women live longer and usually have less wealth than men. This will put increasing pressure on government superannuation benefits.

To balance the changes in employment patterns and to enable people to move from low skilled, low paid employment to skilled and better paid employment, there is a need to provide training and skills development for both those currently employed and those on benefits (Nightingale & Fix, 2004). The attainment of skills and education has been shown to have a positive association with income and health (Marmot, 2002) and has been highlighted as an important factor in developing the New Zealand economy (The Treasury, 2005). However, the distribution of industry training and apprenticeships is uneven and in many industries employers provide few opportunities for staff to advance to more skilled positions (Fletcher & Dwyer, 2008).

Employment is likely to have the greatest influence on income levels and in moving people out of poverty. There is strong evidence to support the importance of employment in poverty reduction. The fact that a person is employed does not necessarily imply that they will not be in poverty – there is strong evidence to suggest that the working poor will be at risk of poverty. This section discussed some of the key factors in mitigating changing the environment for those working on low wages from the effects of benefit abatements. Access to childcare and the role of the minimum wage have all been identified as possible points of intervention. There is clearly a range of strongly held opinions on the role to which legislated minimum wages should play. There appears to be good evidence that raising the minimum wage as a tool for poverty reduction can do more good than harm. However, this debate appears to be far from over and is strongly embedded in competing ideologies.

EDUCATION

Schooling and educational achievements have been found to have a strong association with increased earning potential (Card, 1999; Ferrer & Riddell, 2002). In recent years, education has played an increasingly significant role in determining employment and occupation status (Robson & Harris, 2007). While the weight of evidence supports this relationship, a recent review by Blanden and Gregg suggested that this relationship

can also be seen in reverse, with income having a causal relationship with educational attainment (Blanden & Gregg, 2004). This apparent two-way relationship serves to illustrate the complex nature of social systems and raises the interesting question about where intervention should be focused. It also suggests that only a multi-faceted approach will achieve robust changes in poverty outcomes.

Availability, access and quality of early childhood education is important for both enabling parents, especially mothers, to return to work but also for children's development (Commission on Social Determinants of Health, 2008). Hoescher suggested that early childhood education should be part of a robust package of interventions aimed at reducing poverty (Hoelscher, 2004). However, consideration must be given to how this is encouraged to ensure that inequalities are not exacerbated. Increasingly, governments are recognising the importance of early childhood education and are moving to introduce subsidy programmes (either partial or complete): in the United States with Early Head Start, the United Kingdom with Sure Start and in New Zealand with the government's 20-Free-Hours Early Childhood Care and Education policy. The 20-Free-Hours programme is widely seen as having the potential to provide significant benefits to both the participating children and to society (Ritchie, 2008; Wylie, Ferral, Hodgen, & Thompson, 2006), and has political support from both the Labour and National parties. The primary criticism of the programme relates to the non-extension of the programme to Te Kōhanga Reo and Playcentres, which are primarily staffed by parents and whānau. These services currently are not included in this programme due to the qualification based requirement for trained early childhood teachers (Bushouse, 2008; Fletcher & Dwyer, 2008; Ritchie, 2008). In earlier sections, the pay disparity between men and women (Manning & Petrongolo, 2008; Warren et al., 2001) was highlighted and so too was the role that childcare can play in enabling women to return to the workforce (Francesconi & Van der Klaauw, 2007).

Education is seen as an important precursor in determining whether women with children enter or return to the workforce, and also in gaining access to better paying jobs. Evidence indicates that early childhood education plays an important role in early childhood development providing long-term benefits. However, more direct

access to affordable early childhood care has been demonstrated to improve the likelihood of parents, especially women, gaining access to the workforce.

Chapter summary

This chapter discussed the main areas for income-related interventions including, taxation, social welfare, debt, employment and education. Evidence from the literature appears to suggest that some areas for effective interventions are less likely to be applicable for regional public health units, including taxation and social welfare policy. While other areas appear to offer greater opportunities for regional public health unit intervention programmes. These include areas such as: ensuring full benefit entitlements were received; reducing the reliance of low-income earners on debt especially for fringe lenders; developing a focus on employment as a precursor to education which both enables parents, especially women, to access employment and gain higher paid jobs; as well as the role of early education in the development of children.

The range of evidence available for local or regional interventions was low. Most of the literature identifying interventions tended to discuss national policy level action, which was for the most part inappropriate for a regional health agency. However, the literature did provide general guidance on the direction of action, which in turn will be discussed in light of the results of this research.

CHAPTER THREE: METHODOLOGY

This chapter outlines the research question and the research tools considered to best address this question, see below. The relationship between the research and Regional Public Health is explored and documented. The chapter will outline the methods used in this research including the types of participants considered best placed to provide data that will assist in answering the research question, the specific tools used to collect this information and the processes by which this data was collected and stored. Finally there is discussion on the thematic analytical framework used in this research along with ethical considerations.

Research questions

This research aims to answer two questions:

- What is the role of public health units in reducing the inequitable effects of inadequate income on health and wellbeing? and
- What steps could Regional Public Health take to reducing the inequitable effects of inadequate income on health and wellbeing in their geographic area?

RESEARCHER'S ASSOCIATION WITH REGIONAL PUBLIC HEALTH

At the outset of this research, the importance of linking in the research to Regional Public Health and maintaining a strong relationship with the unit were identified as a critical success factor for the research. To ensure an effective relationship was created and maintained, an advisory group was established within Regional Public Health and a schedule of regular meetings planned for critical milestones within the research, see *Appendix 1: Regional Public Health Advisory Group*. This group was involved in defining the initial study's aims and direction, and became an ongoing source of reflection on the research interviews and subsequent report. It rapidly transpired that the number of formal advisory group meetings scheduled were not required, given that the researcher was on staff at Regional Public Health and had a close working relationship with the advisory group members. The advisory group provided guidance and support during the project's initiation, holding both formal and

informal meetings, to discuss this research. They also provided feedback on draft versions of the research.

Key outputs from this research were designed to provide valuable and practical input into the Regional Public Health income programme and to support the development of an evidence-based programme in line with recent Ministry of Health guidelines on developing public health programmes (Ministry of Health, 2006). This included: the collection of evidence based on income as a determinant of health and the analysis of potentially relevant interventions that could become part of the Regional Public Health income programme.

One additional benefit of this research is that during the research course of the research the researcher was promoted from a public health advisor responsible for developing the 'income' work stream to the manager of the social environments team (in which that work stream resides). This close association between the researcher and Regional Public Health creates an added benefit in that the skills and knowledge gained by the author will be retained by the organisation. These factors combined with the evidence presented within the dissertation and its research findings will assist Regional Public Health to develop a more robust programme for reducing poverty.

Methodology

To answer the questions posed, a research methodology was selected that emphasised an action-based approach that best reflected the close working relationship with Regional Public Health and their desire to develop a income-related programme of work, that this research will contribute to. A qualitative methodology was chosen as the best way to investigate the research question as it provides a broad set of tools for investigating the complex issues surrounding poverty and income-related issues. Semi-structured in-depth interviews with key informants were carried out to gather a range of opinions and evidence from people and organisations involved in the field of public health and poverty prevention in New Zealand. Documentary evidence was also analysed.

ACTION RESEARCH METHODOLOGY

This research uses an action research framework which aims, in part, to study the work undertaken by public health units with an objective of further defining, developing and improving the work of one specific public health unit, Regional Public Health (Wellington). Action research uses an interactive cycle of analysis, problem solving, intervention and re-analysis (D. Whitehead, Taket, & Smith, 2003). The dual roles of the author as both student researcher and employee of Regional Public Health requires acknowledgement in managing to prevent potential conflict of interest. In the Application for Training and Development (the formal process for approving training and development applications at Regional Public Health), provides for the academic autonomy of the author while ensuring that appropriate feedback mechanisms are in place to ensure that the research outcomes are appropriate and applicable for future programme development. To provide further clarity, a disclaimer has been included at the beginning of this document, see page ii. This clarity in the relationship between the research and Regional Public Health allows the researcher appropriate license to discuss and make recommendations on issues that Regional Public Health may not have developed a stated position on, or to present a contrary position to that of the organisation.

The dual role of researcher and Regional Public Health employee has the potential to strengthen the research, in ensuring it is applicable and relevant to the organisation through the establishment of an advisory group within Regional Public Health, and in developing the skills of their employee. The research also benefits from the extensive sector knowledge that the researcher has gained in his 14 years working within the public health and not-for-profit primary care sectors. That knowledge facilitated access to a range of people that have been, or are currently, active in the area of public health and poverty reduction. While these were advantages to the research in that it better facilitated access to key people it also created the potential for bias, on the part of the researcher. These were mitigated through the oversight of both the supervision team and the advisory group.

There are many models describing variations of action research (Reason & Bradbury, 2001; D. Whitehead et al., 2003; Winter & Munn-Giddings, 2001). These all follow a

similar cyclical framework of analysis, reporting, implementation and evaluation. The researcher has chosen to use the Whitehead and Taket et al principles for action research in this research, as it provides a balance between technical and theoretical detail while avoiding becoming overly complex. The Whitehead and Taket principles for action research incorporate a systematic collection of data in relation to the overall goal, the establishment of feedback mechanisms to return the data and analysis back to the system and as a result the enacting of changes to the system under investigation, followed by an evaluative phase to ascertain the overall effects on the system, however not all of these phases were undertaken, see *Table 2*, (D. Whitehead et al., 2003). Specifically the development of the income programme within Regional Public Health is still in its developmental phase. Only a small amount of implementation has been undertaken at the time of writing, making it is too early to assess and evaluate the impact of this research on the programme. However, this research will form the basis for the ongoing programme development and its action research framework will be used to ensure that the cycle of analysis, implementation and evaluation is embedded in the programme.

Table 2: The principles of the Whitehead and Taket et al action research framework

Principles of action research	Research approach for this project
Systematic collecting of research data about an ongoing system relative to some objective, need, or goal of that system.	Achieved: Collection of evidence base, key informant interviews and documentary analysis.
Feedback mechanisms that ensure the data is returned to the system.	Not Achieved: The presentation of this research to Regional Public Health and other public health units will occur following the completion and assessment of this dissertation as will the summary of this research to key informants.
Taking action by altering selected variables within the system based both on the data and on assumptions about how the system functions.	Not Achieved (outside timeframe and scope of dissertation): This will be undertaken by Regional Public Health after the completion of this research, although the ongoing involvement of the researcher will likely result in this being achieved.

Evaluating the results of actions	Not Achieved (outside timeframe and scope of dissertation): Regional Public Health has a strong focus on programme evaluation and this will be a key component of the ongoing income programme within the organisation.

Source: adapted from (D. Whitehead et al., 2003)

Method

A literature review was conducted that reviewed key income-related interventions and is presented in Chapter Two. The methodology for this is described in the section below. The data collection was completed via a series of key informant interviews (Davidson & Tolich, 2003) with a range of people working, or who had worked, within the public health and social science fields including public health units. These interviews were augmented with documentary analysis (Abbott, Shaw, & Elston, 2004) of material sources from those key informant interviews that involved public health units. This section will provide an overview of the key informants interviewed, their roles and experience. It will then discuss the tools used to obtain comment and input from the key informants and discuss the processes by which this was conducted.

LITERATURE REVIEW SEARCH STRATEGY

The literature review aimed to examine the key interventions that could lead to positive impacts on those who receive inadequate income. The literature review search strategy was developed in consultation with the University of Otago library staff in Wellington. It involved the identification of a range of appropriate article databases and other potential sources of literature and aimed to identify journal articles, review articles, books and other documents relevant to the subject under investigation, see *Table 3*. The search was limited to databases, journals and books available through the University of Otago or those available to the public.

Table 3: Online literature search databases and information sources

Online literature database and information sources	Internet address
Ebsco	www.ebscohost.com
Embase	www.embase.com
Factiva	www.factiva.com
Google	www.google.com
ISI Web of Knowledge	www.isiknowledge.com
Medline	www.nlm.nih.gov
Ministry of Health	www.moh.govt.nz
Psyc Info	www.apa.org/psycinfo
Scopus	www.scopus.com
World Bank	www.worldbank.int
World Health Organization	www.who.int
Worldcat	www.worldcat.org

The search phrases or search strings used were developed via an iterative process that began with those words believed to be most relevant to the study subject. A range of alternative words were then used and the results compared. This process enabled the actual search string to be fine-tuned. As a result, the primary search string included the words 'income' AND 'poverty' AND 'initiatives' OR 'interventions' OR 'programme'. In addition some variations were searched, see *Table* 4. Where possible, searches were restricted to review articles as this was considered more likely to return relevant information (Davies & Crombie, 2001). Only research published in English was reviewed.

Table 4: Literature search strings

Primary search string	• income AND poverty AND initiatives OR interventions OR programme
Supplementary words	• income AND poverty AND initiatives OR interventions OR programme AND zealand • income AND poverty AND initiatives OR interventions OR programme OR evaluation

Following the identification of relevant papers, a review of their cited sources was conducted to identify other original papers that appeared likely to be relevant to this study. The technique of reviewing cited sources or cited references in relation to the review of published material has been found to significantly enhance the identification

of relevant literature over standard database searching (Greenhalgh & Peacock, 2005). The decision whether to follow-up the references was based on the information linked to the reference and the reference information itself. This relied heavily on the judgment of the author. However, this process has an inherent potential bias that the review of the cited references may lead to research that is similar and/or supportive of the original research paper thus leading to the unbalanced identification of evidence. The researcher attempted to address this through a focus on the identification of primary sources through the literature search databases. Publications were also identified through the key informant interviews, colleagues and supervisors and these were reviewed and used in the literature review where appropriate.

Throughout this process, emphasis was placed on interventions relevant to the New Zealand environment. This was due to much of the literature focusing on country specific interventions e.g. health insurance analysis or poverty reduction in the third world. Neither of these examples had a strong relevance to the New Zealand environment.

This search strategy produced a wide range of literature. Most peer reviewed literature related to large-scale interventions and policy direction (national policy / action level). New Zealand specific literature primarily took the form of grey literature such as reports from government or non-governmental organisations and a few peer reviewed pieces of research found in publications. There was little in the way of regional specific interventions unearthed during this review. Some key informants directed the researcher to documents that they considered relevant for this research and these documents were considered along with the other literature identified.

RESEARCH SUBJECTS

Two distinct groups of key informants were identified: those employed by a public health unit (henceforth known as 'informants') and those not employed by a public health unit but considered experts in poverty and / or public health (henceforth known as 'commentators'). While all are considered key informants, it is important to make the distinction between these two groups as they play significantly different

roles and provide different perspectives. The informants have a detailed understanding of the operation of public health units and the pressures and constraints of working within the public health unit system. The commentators have a broader understanding of the influences on public health in general as well as having a perspective uncomplicated by the experience of working within the public health unit system. As a requirement of ethics approval, a full list of key informants has not been included because interviewees consent was provided on the basis of full anonymity. However, a general overview of their roles, credentials and experience is provided below.

Informants

The informants were people working for public health units including public health medicine specialists, managers, team leaders, project leaders, public health advisors, health promoters and other operational staff. The intention was that these interviews would be key informant interviews with a single representative of the organisation. However, all but one interview was conducted in a group setting and have therefore been treated as group interviews. While the initial approach to the public health unit sought to interview a single person, it appears that this message was either not communicated effectively or that the people within the public health units felt more comfortable discussing this subject with collegial support. See research strengths and limitations in Chapter Five for further details. Group based interviews have a number of advantages, allowing participants to build on each other's comments and to develop arguments that would otherwise have been unlikely to develop (Davidson & Tolich, 2003). One disadvantage was that some participants may have felt constrained to discuss issues in front of other members of staff e.g. their managers (Davidson & Tolich, 2003). Staff in five public health units were approached and agreed to participate in this research. Two interviews were conducted in one public health unit due to timing factors and the way that their unit had been structured. In total, 23 individuals participated in six separate interviews, see *Table 5*.

Table 5: Description of informant interviews

Number of individual public health units represented	5
Number of group interviews (more than one participant)	5

Range participants in group interviews	3 to 7
Number of single participant interviews	1
Number of interviews declined	0
Total number of informant interviews	6
Total number of participants interviewed	23

Commentators

The commentators interviewed included people considered well placed to comment on income as it relates to poverty and related interventions. All but one of the commentators that agreed to participate were qualified public health medicine specialists (a training programme that includes a master's degrees in public health), with the other having significant post graduate qualifications social science and research. The focus of the selection of the commentators was to identify highly skilled people with a strong track record of experience in the relevant sectors. The high proportion of people participating that had public health medicine specialist qualifications was an unintended result and probably more reflective of the senior public health workforce than of a selection bias. However, this does present a potential problem in that this group of people may hold similar views and perspectives on this and other public health issues. All of the commentators had significant experience working in the public health and social science sectors with half having had senior roles working in public health within the Ministry of Health. The importance of having Māori and Pacific views on this research was recognised early in the research. Of the nine commentators originally approached to take part in this research, two Māori health commentators and one Pacific commentator were identified and invited to participate. Three of the intended commentators either declined to participate or did not return calls and / or email requests to discuss the research. Unfortunately neither of the Māori commentators were recruited to participate. As a result, six commentator interviews were conducted, see *Table 6*, including one Pacific commentator.

Table 6: Description of commentator interviews

Number of commentators invited to participate	9
Number of declined interviews	3

Total number of commentators interviews	6

RESEARCH INSTRUMENTS

The informant and commentator interviews used a series of semi-structured, open-ended questions related to health determinants, poverty and income, as well as questions on new and existing opportunities for public health units to intervene. These questions were developed in consultation with the research supervisors, advisors at Regional Public Health and as a result of the literature reviewed. The questions provided opportunities for key informants to discuss their experiences with poverty and income-related interventions as well as to express their thoughts on future interventions. As the key informants were divided into two different groups, two similar but different interview schedules were developed. The schedules contained a range of questions that had been developed to explore the key informant's depth of understanding regarding income as a determinant of health, and to draw out their opinions on if and where, public health intervention might be best placed. Both schedules covered:

- the participants' knowledge and understanding of the social determinants of health in order to better understand their comprehension of these issues so as to better gauge the quality of their later responses
- the role which income plays as a determinant of health
- the interventions they perceived to be effective in reducing the negative effects of income on health
- (informants) the actions they were aware of, either planned or currently being undertaken, within their public health unit in relation to income
- (commentators) areas in which they believed public health units could initiate action to positively impact on income-related issues
- the priorities for action in the future in relation to income interventions.

A full interview schedule is available in *Appendix 2: Interview schedule*.

DOCUMENTARY ANALYSIS

At the completion of each public health unit informant interview, a request was made for any relevant documents regarding the informant's public health unit's strategic

directions and / or documents regarding income-related interventions (e.g. research, project reports, analysis, and evaluations). Once received, these documents were analysed. A total of eight documents where obtained. The majority (six) of them were the organisation's strategic plan (three were public health unit strategic plans and the other three were the district health board strategic plans, as no specific public health unit plan had been developed at that time). The remaining two documents were evaluations of projects that have a close association with income. Only one public health unit had identified programmes that included objectives (either primary or secondary objectives) around income. Of those programmes, only two had any evaluations or reviews available for this research. The document title and sources will not be referenced within this research as this could lead to a breach of confidentiality as the document will indicate which organisation the informant was from and could reveal the name of the informant.

RESEARCH PROCESS

Public health units that were believed most likely to have considered income-related interventions were targeted by this research. These public health units were identified following discussions with Regional Public Health, the sector knowledge and experience of the researcher and through the use of 'snowballing'[6] techniques from other interviews (Davidson & Tolich, 2003). Where contacts could not be identified within a public health unit, the health promotion manager was approached. The commentators were identified from a mixture of people known to Regional Public Health, 'snowballing' through other key informants, and identified through discussions with the research supervisors and the Regional Public Health advisory group. Commentators were sought for their expertise in public health, leadership within the sector, and / or knowledge and experience of poverty and income in New Zealand. Efforts were made to ensure that a cross-section of views was represented and that commentators were sought that had a range of experience and included people that

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[6] 'Snowball' sampling uses a small group of informants with knowledge or skills desired by the researcher. These informants are used to generate other informants with similar skills and knowledge of the subject area (Davidson and Tolich, 2003).

work or had worked at the Ministry of Health, district health boards or non-governmental organisations.

Potential participants (informants and commentators) were initially approached via telephone and followed-up with an email containing the information sheet outlining the research: see *Appendix 3: University of Otago Ethics Application*. Arrangements were made for a suitable interview time. Participants were advised that the interviews would be conducted face-to-face and would last approximately one hour. One interview was conducted over the telephone due to difficulties in arranging a suitable time when the interviewer and the interviewee were in the same city. While this may have impacted on the quality of the information obtained, the interview still provided interesting information and additional perspectives on the area under investigation. In each case, three attempts including both phone and email, were made to contact the potential participant, at which time they were considered to have declined to participate in the research.

The key informants were advised that the interview would be recorded and that these recordings would be destroyed at the completion of the research. Each participant was requested to provide written consent prior to the interview taking place. In accordance with University of Otago ethics and research policies, notes from the interviews will be securely kept for five years. The key informants were advised that they could withdraw from the interview at any time during the interview and were advised how to contact the research supervisor should they have any questions or concerns. It is important in any research to consider issues of anonymity for research participants. To provide key informants with the freedom to speak openly during this research, all attempts to protect the anonymity of participants and their organisations have been taken. While this research has used comments, opinions and quotations from the key informant interviews in the results chapter, a code number has been assigned to each informant and commentator. These codes will not be associated with any individual or organisation.

Each interview used the interview schedule discussed above. The use of semi-structured interviews allowed for broad ranging discussions on a range of subjects relevant to this research and provided the participants with the opportunity to raise

issues they felt significant to the research. All interviews used this interview schedule. However, each interview was allowed to develop in its own way resulting in the subjects covered in each interview being unique. The interviews were recorded using a digital recording device and the recordings were used to supplement the notes taken at the time. Interviews were not directly transcribed but the recordings were used to verify and provide additional detail to the interview notes – this included the capturing of accurate quotations from interviewees. All interviews were recorded. The interviews were conducted between 30 June and 20 October 2008.

Ethics

This proposal has been reviewed and approved by the Department of Public Health, University of Otago, see *Appendix 3: University of Otago Ethics Application*. Interviewees were able to indicate if they wanted a summary of the research once completed. This offer was frequently taken-up and a summary will be distributed once this research has been completed and accepted by the University.

Analysis of documents and interviews

As discussed above, the data from the interviews was collected via notes taken at the time and supplemented through reviews of the recorded interviews. Each interview was listened to at least once in its entirety and specific segments captured as quotes for the analysis. A thematic analysis of this data was undertaken (Davidson & Tolich, 2003). This involved the identification and correlation of themes, ideas and knowledge imparted during the interviews. This was achieved through a process of reviewing the complete interview notes and coding significant topics and discussions. These coded items were then grouped across the interviews to identify themes. Within these themes, similarities and differences between the interviewees' views were explored.

The documents obtained from the public health units were also analysed. The focus of the analysis was on assessing the organisations' strategic directions and past, current or future work in areas associated with income-related interventions. These

documents were compared and contrasted to the information obtained from the informant interviews.

Chapter summary

This chapter outlined the research question and determined that a qualitative approach using key informant interviews would be well suited to answer it. It discussed the role that this research would play in forming a building block for Regional Public Health's income programme using an action research approach. The methodology for how the literature review was undertaken was outlined and the specific methods used to identify appropriate key informants was discussed. The processes by which the key informants were approached, recruited and interviewed were reviewed as well as the acquisition and review of key documents from the public health units. Ethical consideration of how the research ensured that the participants' anonymity was protected, thereby allowing them to speak freely, was highlighted. The chapter was completed with a discussion about the use of thematic analysis.

CHAPTER FOUR: RESULTS

In this chapter the outcomes of the key informant interviews with public health unit informants and non-public health unit commentators are presented along with the analysis of documents obtained during the public health unit informant interviews[7]. The following section examines what the key informants understand about social determinants of health, and looks at these determinants and their place within public health unit strategic documents and considers the evidence of action within their services regarding income.

Awareness of social determinants of health and action on income

The documentary analysis identified the strategic plans as key documents for review. Of the six strategic plans obtained, three were specific to public health units and the remaining three public health units had no specific strategic plan and deferred to their district health board strategic plan. All six plans demonstrated awareness of the social determinants of health and identified them as being core to good population health. The plans that were specific to the public health units provided greater levels of detail and had greater clarity regarding converting strategy to action, although given the breadth of scope of the district health board plan, this is not surprising. Few of the district health board plans were specific about how they might address these determinants within their organisations. One that did provide a reasonable level of detail identified inter-agency collaboration outside the health sector as essential to effecting change in the determinants of health. This was captured in a statement that "change [of the wider physical and economic environment] on this scale is only achieved through developing strategic relationships…" (district health board strategic plan).

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[7] The documents obtained pertaining directly to that public health unit or district health board, while cited in the text, do not appear in the references. This is intended to protect the anonymity of the public health unit, their district health boards and the participants in the informant interview. The rationale for this has been discussed in Chapter Three, Methodology.

The analysis of the interviews and the strategic plans highlighted an apparent divergence between strategy and action. The documentary analysis found that information obtained in the corresponding informant interviews showed little sign of co-ordinated activities to address the social determinants of health. While two of the three district health board plans discussed the need to take action on income (as a social determinant of health) little action was identified through the informant interviews. It is important to note that this research only identified informants from within public health units and it is possible that others within the district health board may have been involved in work to address the determinant of health.

The three public health unit strategic plans displayed a strong understanding of the social determinants of health and discussed in greater detail how they planned to address them. This is perhaps not surprising given the comparatively narrow scope of the public health unit, which focuses only on the public health aspects of the district health boards' operations. One strategic plan went into specifics about how the public health units would begin to address issues such as income, although the other two discussed income issues more in terms of goal setting without detailing their approach to addressing these issues. All of these plans identified the need to work collaboratively with other agencies to address the social determinants of health.

Key informants were asked questions to gauge their understanding regarding determinants of health and the significance of income as one of the determinants of health. All participants displayed a good theoretical understanding of the determinants of health and of their role in addressing inequalities. Four of the six public health unit informants interviewed mentioned that they actively considered determinants of health when undertaking strategic and service planning.

There was a closer alignment between the rhetoric in the public health unit strategic plans and the actions described during the interview with the public health unit informants than there was between the district health board plans and the corresponding informant interviews with their public health unit staff. The public health unit strategic plans appeared more grounded and when actions were described, these appeared better defined. The district health board plans often discussed

determinants of health in terms of big picture aims and goals but did not provide much clarity about how they would be addressed.

Both informants and commentators agreed that income has an association with health and that it is in fact one of the most important determinants of health. The following two comments were typical of this discussion.

> *One would have thought that its [income] got one of the strongest correlations as a determinant of health, which should be central to public health* – Commentator 6.

> *When we looked at what impacts on people's health, we found that almost half of the health outcomes had a relationship to income* – Informant group 1.

One public health unit informant signalled that there were "different levels of willingness to look at social determinants of health" within their public health unit, citing "a culture of being risk averse" as a reason for lack of willingness by some staff (Informant 4).

With the exception of one public health unit, the public health unit informant interviews demonstrated that even where income had been considered at a strategic level, this intention had not been converted into action to address income-related issues. One public health unit informant noted that "income was considered when undertaking [our] strategic planning but [we] decided to focus on healthy housing" (Informant group 5). Another noted that they "expect income and poverty to be discussed in 2009 as part of the new service planning process" (Informant group 6).

Four informants and commentators alluded to common perceptions, or misconceptions, regarding poverty in New Zealand. They noted people outside public health circles rarely consider that New Zealand has a poverty problem, with one informant noting "I have very rarely heard poverty discussed in the New Zealand context" (Informant group 5). Interestingly, one commentator noted that "there is a belief that maintaining people on very low incomes is seen as a driver to labour

participation and there is an implicit ethical decision made about how much people should suffer for the greater good of the country" (Commentator 6).

Another noted that there is a view that inequality has a cultural component and that "there is something within the culture of these groups that gets them into this situation". However, they go on to suggest that the reality is that "for the most part, it's economics" (Commentator 1).

Three commentators challenged why income and poverty have not been given greater attention by public health units. One commentator noted that income is a major determinant of health with good national and international evidence to support it and that still "it fascinates me as to why it is treated like one of the dirty determinants that no one really wants to do anything about" (Commentator 6). They went on to suggest that this may be a result of public health, in general, being staffed by people from an upper middle class background who may read literature on poverty but are very unlikely to have experienced it directly, therefore it does not get the attention that it deserves.

> *The likelihood that they will mix with people from that [poverty] environment is low. So it is just not on the agenda* – Commentator 6.

This is supported in the data by an apparent lack of public health programmes to address income-related poverty, with only one public health unit out of the five interviewed reporting developing any specific interventions to address income. Three other units had a less focused approach to the issue, developing projects that addressed income as an issue but only as a secondary or consequential outcome. One example of this is the retro-fitting of insulation into houses that reduces the cost of heating, improves health and reduces absenteeism from work, thereby increasing the opportunities for workforce participation and the generation of income (P. Howden-Chapman et al., 2007).

Two important points were identified in this section – one that the commentators and the informants demonstrated sound understanding regarding determinants of health and of the important role that income plays in this. This was supported in the

strategic documents analysed. The second point highlighted the gap between knowledge and application with few tangible projects or initiatives designed to combat inadequate income. The following section examines key informant interviewees views on the context and role of government policies and considers how public health could better align itself to advocate for health consideration in these policies. It also reports back on key informants' thoughts around skill development within public health units to effectively put the case for health in non-health sector policies.

Drivers and influences of poverty

THE ROLE OF CENTRAL GOVERNMENT

When asked what opportunities key informants saw as addressing income-related issues, the majority of key informants commented on the significant effect that government policy has on income. One informant discussed the importance in taking a life course approach to this noting that "people are limited on what they can bring into a household [in terms of income] by their social settings such as upbringing, education, etc" (Informant group 3).

Others who discussed the role of government policy focused more on the contemporary effect that recent government policies have had on income and some of the other drivers of poverty. Four of the six commentators focused their attention on the period of change from the mid 1980s to late 1990s, noting the effect that successive government policies had on vulnerable populations and the corresponding increase in poverty. One commented on the significance of this period by noting that "we went through a period in the 1990s where they [the government] created an enormous amount of poverty. It was the worst period of social policy in our history, post war" (Commentator 3). Another commentator noting that, even with the reduction in poverty levels in the last five years, "beneficiaries have not recovered their purchasing power from the 1990s" (Commentator 5).

One commentator stressed that in recent times, there has been a significant shift back towards supporting those on low incomes and as a result, a significant drop in the levels of poverty.

What a lot of people forget is that while this [Working For Families] is an enormous intervention, it [had] turned out to be the largest redistribution of income done in three decades. The fact that it was 70% successful [at 50% threshold] means that it was 30% unsuccessful… so it did not solve child poverty but it was a huge intervention – Commentator 3.

INTERSECTORAL WORK OF PUBLIC HEALTH UNITS

There was general consensus among key informants that the major solutions to poverty lay outside the health arena and that addressing them would require a multi-sectoral approach. One commentator identified policy gaps as a significant area that required greater attention and the need for central government to develop "clear policies around income and income inequalities" (Commentator 6). Another commentator took this view further and suggested that "the public health communities can play a considerable role in terms of the framing of inequity and inequalities" (Commentator 5).

Over half of the commentators discussed how public health units should be encouraged to become more engaged in this area. One commentator called for a greater shared approach to these issues and noted that "one of the criticisms I've got of the whole field is that our social policy people and the healthy public policies people have a lot of respect for each others' work but they don't work together" (Commentator 3).

It was noted by one commentator that there is a need for strong links to other branches of government and supporting employment, education and "monitoring what is actually happening in terms of income, inequalities and advocate for measures to address it" (Commentator 5). Another commentator suggested "a more active role in working with individuals and families to ameliorating [the effect of low] income, low educational attainment or employment [in poorly paying jobs]" (Commentator 4).

One commentator noted the importance of recognising the actions already taken that lead to a reduction (or increase) in poverty and working with agencies such as the Ministry of Social Development and non-governmental organisations that are already

operating in this area rather than starting cold. This was articulated by one commentator as needing to "recognise where the energy is to build on change rather than simply looking at where the deficits are" (Commentator 3).

DEVELOPING SKILLS WITHIN PUBLIC HEALTH UNITS

Three of the six public health unit informant interviews raised the issues of public health unit's current level of ability, skills and knowledge to adequately engage and be effective in the area of income-related poverty. One informant questioned whether there was sufficient leadership and expertise within public health generally to take on issues like income. A commentator touched on this theme by suggesting that public health needed to increase its economic skills and "work more closely with those in the finance and economic arms of government" (Commentator 3).

Two informant interviews noted the need to "invest in our own knowledge base" (Informant group 1) and that "there are opportunities around us [to get] better skill in the area of income, taxation, etc" (Informant group 1) and that we need to make sure that we take advantage of these.

Capacity to work on areas such as income was identified by all of the public health units. Many alluded to competing pressures between different work areas and the need to choose which areas of public health a public health unit is going to focus on. As one key informant noted that public health unit staff could engage more with income interventions but "this does not happen because of the pressures of their workplace" (Informant 6). Another informant summed this up by saying "if we do [get involved with income-related work] then what else gets dropped because we can't do everything" (Informant group 5).

It is important to note that there was general agreement that the solutions to inadequate income primarily lay outside the health sector and for the health sector to effect change, it would need to work with these other sectors. However, the ability of public health units to achieve this was limited by two factors – gaps in their own skills, expertise and leadership mixed with a raft of competing priorities.

Regional level interventions applicable to public health units

This section examines the interventions and areas of focus suggested by the key informants and their applicability for action by public health units. These have been grouped into six broad categories including taxation, social welfare, debt, employment and employment conditions, education, and the health system itself. This is followed by consideration of two methods of effecting change outside the health sector: advocacy, and collection, analysis and dissemination of evidence.

TAXATION

While taxation policy was indicated in the literature as potentially having a significant role on income and poverty reduction, few commentators or informants discussed this as a viable area for a public health unit action, primarily as this is a highly political area and it was suggested by some that this would be better suited to non-governmental organisations. Two commentators raised the role of redistributive policies as a means of increasing income and reducing poverty, however, they did not infer that this was a role of a public health unit.

> *How we can address poverty lies in the decisions that we need to make as a society about do we want to have a redistributive society where there is some collective sense of society, especially regarding those who are most dependant, or do we want to have a society which prioritises individualism* – Commentator 2.

Another commentator noted that "there is not enough [resource] to go around" and to address poverty, a redistribution of that wealth will be required. One implication of this would be a reduction in the wealth of the wealthy which is likely to be resisted and this commentator believed that "that is quite a big policy issue" (Commentator 6).

While changes to taxation policy hold great potential to affect income and thus should be considered an important tool, the lack of discussion and comment by key

informants, along with the strong political drivers behind it, make it an unlike avenue for regional public health action.

SOCIAL WELFARE SYSTEMS

There was overall recognition of the role that the welfare system plays in reducing poverty and in supporting those most in need. Most key informants recognised that the Ministry of Social Development, and its operational arm Work and Income, were key frontline players in mitigating the effects of income-related poverty.

> *The welfare state has been a fantastic development but one of the downsides is that it has created in certain families a whole intergeneration benefit dependence… the way out of this is not to force people into work but to provide incentives. Which is what 'Working For Families' does – C*ommentator 3.

While this commentator sees improvements from recent changes to the broader policy environment, an informant points out that while systems may be good, they have found evidence of them being applied inconsistently. "We found that entitlement [to benefits] is a huge problem and that differences between what a person would get if they lived in one district health board region compared to another were significantly different" (Informant group 1). These inconsistencies in the administration of benefits were also touched on by two other informants.

Only one public health unit developed a project targeted at or around benefit entitlement. This involved a large amount of work raising awareness of the issues of entitlement and making sure the key players (e.g. primary health organisations and non-governmental organisations) were aware of the range of sometimes complex benefits and entitlements and worked across key agencies to address concerns. This work extended to ensure that their own staff (primarily public health nurses), who had frequent contact with at-risk clients, had the necessary skills to identify entitlement gaps.

In a separate project, that same public health unit was delivering a public health nursing project embedded within a Work and Income office[8]. The aim of this role was to improve the health and wellbeing of Work and Income clients. This was intended to be achieved through improving client access to health and social services with appropriate referrals and improve co-ordination and management between Work and Income and health and social services. While improving access to benefits was not specifically intended to be an outcome, anecdotal evidence suggests that this is likely to have occurred as a result of the improvements in the case managers' understanding and knowledge of health matters. This role has recently been the subject of an evaluation that concluded a more holistic approach was now being taken with the clients of the Work and Income office (Evaluation report, 2008)[9]. The evaluation concluded that a series of barriers had been identified and the public health nurse had done a "great deal to reduce [these] barriers clients faced accessing health and social services" (Evaluation report, 2008 p 39). In addition, the report found that relationships and understanding between the Work and Income office and a range of community agencies including the local primary health organisation, medical practices and Māori health organisations, had significantly improved.

Another initiative designed primarily to improve health outcomes was a skin infection project. Part of the implementation of this project involved the clarification and establishment of systems with Work and Income to enable beneficiaries to gain access to additional resources to purchase skin treatments, thereby increasing their discretionary income and health. This involved the mapping of referral systems to simplify the process and ensure correct provision of funds for the treatment of these

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[8] The Work and Income public health nurse was employed by the public health unit but was primarily based within a Work and Income office.

[9] The evaluation report cited here does not appear in the references to protect the anonymity of the public health unit and the participants in the informant interview. The evaluation was based on a review of relevant literature and an analysis of documentary evidence. The data collection included a series of in-depth interviews, telephone interviews and questionnaires with the project advisory group, Work and Income staff, community health providers and clients, 32 in total.

conditions. This programme has also recently been evaluated and it was concluded that the programme achieved good results for those people referred to Work and Income, in that people frequently received additional disability allowances (Evaluation report, 2007)[10]. The report noted that the referral process operated effectively where the public health unit had control over the generation of referrals to Work and Income, however, there was a poorer level of referrals from the non-public health unit organisations.

The other five public health unit informants did not report any specific programmes designed around income and welfare benefits. One public health unit informant questioned the role of public health units being involved in this area at all as outlined in the following quote.

> *I don't see links between public health units and benefit [initiatives]. What's the value of the public health unit being involved there? What does the public health unit bring?* – Informant group 6.

Differences in who received benefits and the levels of these were highlighted by half of the commentators. The focus of this was around the systemic differential treatment of the elderly and children, and raised questions about New Zealand society's approach to whom the state extends its 'duty of care'. One commentator noted "we don't have many poor elderly in New Zealand" (Commentator 6) and this was attributed to the effectiveness of advocacy groups for the elderly in maintaining a reasonable level of superannuation. This commentator and others noted the different standard of care we extend to children. Typical of these comments are "we have decided that children and families are not as important as old people" (Commentator 6), and that current policy frames are "discriminatory in that parents [are seen to] have an obligation to look after their children; therefore the state does not need to".

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[10] The evaluation report cited here does not appear in the references to protect the anonymity of the public health unit and the participants in the informant interview. The evaluation was based on hospital discharge data, administrative data from Work and Income and the public health unit, a document review and interviews with key stakeholders.

This commentator goes on to suggest that if this argument was extended then "older people [would be seen to] have a responsibility to look after themselves and their families to look after them" (Commentator 2).

While several commentators noted that there were few elderly people considered to be below the poverty line, one commentator suggested that this might radically change in the near future with the cushioning effect of the levels of home ownership falling and people living longer.

> *Currently 8% of 65-84 year olds living independently are renting, leaving 92% living rent-free. With home ownership now dropping down and superannuation [lowering to be] now only just above the 50% poverty line, there could be some serious problems as the baby boomers start to reach retirement… I'm really concerned about the dropping level of home ownership. Mortgage free home ownership is what is protecting older people from poverty* – Commentator 3.

Social welfare policies and implementation was seen as fundamental to ensuring people received sufficient income to maintain a healthy life. The shape and approach of current social welfare polices was raised, however, regional interventions focused more on the implementation of these policies rather than influencing the policy direction itself.

DEBT

The issue of debt was raised by two public health units. While these public health units noted this as an area of concern, neither had developed any programmes to address these issues.

> *We have identified situations where a family's income looks ok but their levels of debt to either Work and Income or elsewhere makes the disposable income insufficient* – Informant 4.

> *We are aware that issues around debt, especially loan-shark debt with huge interest rates, are also causing huge problems for some communities* – Informant group 1.

This was an area that was not raised within the commentator interviews although one commentator briefly raised concerns over debt in relation to gambling. Debt was not an issues that was prompted for or raised by the interviewer during the interviews.

One commentator raised the area of remittances whereby Pacific families transfer their income to the islands or gifting to family. They noted that the value of gifts or remittances was not necessarily the problem as this was a process of redistributing wealth across the wider family network. The primary problem facing these families was the charges they face in sending this money back to the islands.

> *Three out of four Pacific Island families send money home… the banks and the middle people charge anything up to 25% whereas in other parts of the world its more like 5%"* - Commentator 1.

This issue has been recognised by the government and in 2008 regulations were enacted to reduce the cost of money transfers from New Zealand to the Pacific islands (Clark, 2008). It is probably too early to know if this strategy has been effective.

Debt as a means of supplementing income appears to be an increasingly important issue. While this has only been recognised by a few of the public health units involved in this study as a potential issue, it is an important consideration in the discussion on inadequate incomes. While remittances within Pacific communities do not affect the income of the earning family, it could be considered as expenditure. It is a source of income to the recipients who are often considered part of the extended family, which raises questions around the cultural context of family.

EMPLOYMENT AND EMPLOYMENT CONDITIONS

Employment was raised by five of the key informants as an area of concern. While many of the comments from public health units focused around specific interventions,

some commentators described the importance that employment plays in limiting a person or a family's access to adequate income and risk of poverty. One commentator suggested that "in a capitalist society the only sustainable way out of poverty is through employment" (Commentator 3). This comment touches on those of several other key informants around the importance not just of employment but of the quality of pay and conditions. Both commentators and informants raised concerns over low wages, increased casualisation and the lack of opportunities to advance in some low paid jobs. The period of reforms circa 1984–99 which was characterised by deconstruction and privatisation of large portions of the state, the advent of the Employment Contracts Act 1991, the drop in unionisation and the loss of low skilled work during this time were also highlighted by key informants as important factors affecting income and in raising poverty levels. One commentator pointed to the difference in wage rates between New Zealand and Australia and suggested that this difference may be associated with differences in unionisation as this is a "strong factor in maintaining good wages" (Commentator 6).

Three public health units have, or are planning to, implement workplace wellness programmes. These programmes are intended to deliver direct benefits to the employees of the workplaces involved through increased health and wellbeing and as a secondary benefit to the community through enhanced job security and greater economic prosperity. Combined, this is thought to improve the health and wealth of individuals, workplaces and communities.

> *In our workplace setting [programme] we want to be linking with unions, who traditionally have a very clear focus on wages. Our work will focus on workplace wellbeing which will result in lower levels of absenteeism, higher productivity and this all amounts to more productive workplaces and greater job security* – Informant group 2.

District health boards are significant employers within their communities and were seen as needing to take a lead in employment and quality of employment opportunities. Three of the public health unit informants discussed the role that district health boards could play in the area of employment. Two public health unit informants suggested that their district health boards could do more about employing

people from disadvantaged communities, one of them suggesting that "it's a really good way to get income into a community as well as the family" (Informant group 2). Another informant took this a step further in questioning the district health boards as to the quality of the jobs that they are providing and the recent practise of contracting out services to employers who "employ highly casualised staff and have poor pay and conditions" (Informant group 1).

One public health unit informant discussed how they had implemented a programme designed to train and recruit people from their at-risk communities into the health sector.

> *We have identified that there is a lack of young people entering the district health board and for that matter, the public health unit. We are now proactively marketing what the health service is and can do. This has meant that we have been attending school job and career days to say 'hey there is more to health than being a doctor or a nurse. This is what a community worker or a health promoter can do. We have also taken on an intern position for new graduates* – Informant group 3.

Employment and the quality of employment were seen as important factors for generating adequate income. Unionisation was suggested by some key informants as a factor that protected and enhanced employee conditions. The key informants' suggested that public health units could seek to ensure that their district health boards were leaders in promoting good employment and employment conditions within their communities and that this could be achieved through leading by example, especially for low income workers.

EDUCATION

Education was seen by half of the commentators as being central to people's ability to source good incomes. One commentator noted that "education, or lack of it, is probably the key determinant of poor income" (Commentator 1) as low educational attainment limits a person's ability to access better paying jobs. Another noted that the New Zealand education system is, on average, producing good educational

outcomes but it is that "tail of underachievement" (Commentator 4) that is of most concern.

The success and quality of the education system was seen by two commentators as central to making improvements to earning capacity and thereby reducing poverty levels.

> *Teaching is where it's at. If you have a crap teacher in a crap school and you come from a crap family home, well you are stuffed. But if you come from a dreadful socio-economic background and go to a school where your teacher is interested in you and then at least you have a chance* – Commentator 1.

Key informants identified concerns with the school environment, the learning choices or direction given to students and the home learning environment, noting that all are important factors affecting educational achievement. The apparent failure of the school system to achieve equitable outcomes for certain groups was highlighted by one commentator as "people from disadvantaged communities are being trained for low income jobs thereby continuing the cycle of low income, instead of training people for better jobs" (Commentator 6). This highlights points made by other key informants around the importance of reducing inequalities wherever they exist.

Another commentator, of Pacific ethnicity, noted that this apparent failure in the education system could not be solely attributed to the education system but also extended to the attitudes and values held within the community.

> *I think there is an appalling attitude among Pacific families that 'you go to school to learn' and very little interest is shown within the home...[I] see it as important for communities to engage in this learning process and create an environment where kids can learn [not only at school]* – Commentator 1.

The link between early childhood education and overall educational achievement was highlighted, and issues around access and performance within the early childhood education sector were also raised as a concern.

> *I see two problems with early childhood [education] – one is quality of early childhood education and two is the availability of early childhood education [to all sections of our society]* – Commentator 1.

One commentator suggested that public health units were "more concerned with where the source of the rotavirus outbreak is than looking at how we support and ensure that universal access to early childhood education is achieved, which has been shown massive public health returns" (Commentator 5).

Education was seen by many key informants as the key to creating opportunities for people to gain access to better income. While the interventions to achieve this do not sit in the health arena, there are opportunities to work with the education sector to improve both access and quality. However, the key informant did not identify any specific area in which this might occur. The one specific intervention discussed involved public health units reconsidering how they interact with the education sector and suggestions were made regarding the reorientation of health work away from health and safety to access and quality.

HEALTH SYSTEMS

All commentators, but only one informant, raised issues around the health system playing an important role in income protection and poverty reduction. The prevention of ill health and the rapid recovery of health, along with the appropriate support mechanisms, were all seen as important factors in minimising the effects of health on income and poverty. However, few existing initiatives were identified by either group.

A person's health status, or that of a family member, was raised as an important factor in their ability to generate adequate income. This was encapsulated by one commentator who stated "ill health can lead to a decline in income and employability [which results in increased risk of poverty]" (Commentator 4). Just under half of the key informants acknowledged that the health system itself had a significant role to play in reducing or preventing poverty. Access to services was highlighted as fundamental for ensuring good health. Beyond this all of these key informants

identified the need to ensure that the services the health system delivers do not result in additional pressures on those families already in, or at risk of being in, poverty.

> *First be proper with your own things and make sure that this [cost being a barrier to services or health] does not occur within your own public health unit then look out to the wider district health board…For example, if smoking was important then you would make sure that the cost of NRT [nicotine replacement therapy] was not a barrier* – Commentator 4.

Two commentators highlighted the role the public health units have within the district health board environment and called on public health units to better use this position to influence their own district health board(s).

> *Public health units need to behave more strategically, [they] need to wise up and start using district health boards and [realise] that they are part of one of the most powerful organisations in their area* – Commentator 5.

> *An advantage for public health units is the fact that they are part of district health boards and the links they have to clinicians, although these have not been well used to date* – Commentator 2.

Three key informants noted that health services could, and should, play a far more active and direct role in poverty reduction. One cited the relative silence from the public health community in regard to supporting district health boards in their struggle around primary care fees. One informant suggested that health services should play a more active role in "identifying at-risk people [low income or casualised employees] and making sure things are put in place to help them… looking at correct entitlements, discussing how they might earn more with the skills they've got, etc" (Informant group 1). A commentator highlighted the need for the health sector to take a more active role in ensuring that people had access to adequate incomes. "I think that it is important to try to make income, access to allowances and benefits, employment opportunities and all those things core business of primary healthcare" (Commentator 6).

Health can play a significant role in people's access to adequate income, both through minimising the effects that ill health might have on a family's income and through better utilising the opportunities that arise from direct contact with patients. There was a belief that public health units were ideally placed to play a part in reorientating the health system, specifically the primary and secondary care to take a broader view of 'caring' for those people using its services and thinking of this as more than simply treating their ailments.

PUBLIC HEALTH ADVOCACY

Public health units have long had a mandate to speak out on issues affecting public health. This is especially true for those communities marginalised within society. Eight of the 12 key informants discussed how the role of advocacy by public health units was a fundamental part of good public health practice. Five out of the six commentators suggested that public health, in general, should take a more active stand on issues such as income and poverty. These thoughts were summarised by one commentator in saying that "we need to re-radicalise public health" (Commentator 6). This was not confined to public health units, but also extended to non-governmental organisations which "have been so well supported [with the recent liberal labour government that] some of the more radical aspects of public health [that] challenge the government are not happening" (Commentator 6).

> *I would like to see a lot more advocacy from public health around the issues of income – it tends to be left to a few individuals like the Children's Commissioner* – Commentator 6.

Another commentator described the traditional role of public health units as

> *Waving the flag at hearings and tribunals and saying 'hey this is bad for health'. While nothing is wrong with this approach, public health units need to get more sophisticated about our approach and look at how do we work with other agencies to help them achieve their goals rather than have a completely health-centric view* - Commentator 5.

Two public health units identified the need to develop their own positions on issues to give greater solidity to their argument and a shared (and approved) understanding of where the public health unit stood on any given issues. However, progress on getting these position statements approved has been slow with one public health unit reporting significant delays in obtaining the necessary approvals from their district health boards.

Most of the commentators and many of the informants discussed the limitations of advocacy, especially when it bordered on lobbying on current government policies. A commentator summarised this discussion by saying:

> *It [advocating or lobbying] would be improper as that [as] an employee of government we are responsible for implementing the government's policies, informing it as well as we can. But once government has made a decision then implementing them, and continuing to inform* – Commentator 3.

An informant questioned the appropriateness of the public health unit becoming involved with issues such a redistribution of wealth or improving workers' pay and conditions as these were seen as "getting into the political arena and while there is a role for the public health community to advocate for these things, it may not be appropriate for a public health unit" (Informant group 2). This hesitancy to engage in what could be seen as 'political' advocacy was also echoed by other public health unit informants. These comments about the role of advocacy and informing debates were the focus of discussion in many of the interviews and are discussed further in the following section.

One commentator suggested that if public health units were to look towards becoming more involved in this area, they should be cognisant of the existing environment and what has gone before and by whom.

> *An enormous amount has been done to respond [to the rise in poverty] in: access to doctors [primary care], Working For Families, minimum wages, housing. If you want to bring about policy change, it is this that you want to build on* – Commentator 3.

Another commentator pointed to collaborative approaches with organisations or groups already active in the area of poverty reduction.

> *Critical to getting advocacy out there is finding people [champions] with credibility and forming partnerships providing information and advice. A good example of this is in Auckland with the links between Paediatrics Department, Paediatric, Child and Youth Epidemiology Unit, and Child Poverty Action Group and the sharing of information and analysis having been a superb example of what can be done [through collaboration]* – Commentator 2.

Two public health unit informants also identified the need to find 'partners' and to use collaborative relationships to further address income issues. This approach was driven out of the recognition that the primary drivers behind poverty were not within the health sector and would need action before non-health agencies could effect change.

> *We've been advocating to strengthen the relationships between Work and Income, Ministry for Social Development and Inland Revenue Department to give public health input into their decisions and to help link them into the work [that our public health unit has been doing]* – Informant group 1.

The key informants agreed that advocacy was a fundamental tool of public health. However, they were cautious about the extent to which it could be used by public health units, as they are part of the government apparatus. An important fundamental to implementing any advocacy was the defining of a position on the issue. While many of the public health units identified this as an important step, they also noted organisational and political limitations on setting these positions. Advocacy remains an important tool but further clarity is needed to determine how it could, and should, be used in the public health unit environment.

PUBLIC HEALTH INFORMATION, ANALYSIS AND DISSEMINATION

Over half of the key informants identified an expanded role for the public health units in the collection, collation, analysis and dissemination of information. There was a strong feeling among respondents that the analysis of health data and drawing the links to the determinants of health should be strengthened within public health units. This allows for greater community debate on the issues, causes and solutions to improve the conditions that have been shown to affect health. The role that evidence can play in informing policy makers was also highlighted. This was summed up by two informant comments.

> *One role for us [public health unit] could be in interpreting the health evidence for the other sectors and spelling out how this relates to their areas [of work]* – Informant 4.

> *We have access to stories [of hardship] through our staff and should be using those to advocate for better outcomes* – Informant group 1.

The theme of advocacy was further discussed by one informant who suggested that public health units could become more active in supporting other agencies with information that can be used to generate debate on poverty.

> *While we are limited as to what we can say and do, there are opportunities for us to support other agencies to engage in these debates by providing evidence and building pictures of what's happening* – Informant group 1.

Three key informants commented on the need to take this analysis to the national level, and some called for greater national information gathering, analysis and co-ordination. One informant noted that "part of our approach to public health is looking at developing a joined up approach [on a regional and / or national basis] and getting some consistency on issues" (Informant group 3). The discussion on consistency was echoed by two of the commentators with one suggesting that there is "huge variation in practice in the public health units up and down the country and there is value in a

central collector, sharer and disseminator of information on good practice" (Commentator 1).

Three key informants discussed the value in using Health Impact Assessments[11] as a means of assessing the potential health impact of policies. One commentator suggested that public health units should take a more active role in performing Health Impact Assessments on policies in conjunction with the relevant agencies and extend this to playing a "greater role on the monitoring and impact of these policies on the health of the population" (Commentator 1).

One commentator did not limit the use of tools like Health Impact Assessment to government policies and discussed their application within their own district health board environment, suggesting that public health units "need to look at the public health impacts of the health system and the income-related aspects are really up there in terms of their potential for good or bad" – Commentator 5.

While, with regard to advocacy, the key informants raised a number of blocking issues, there was general agreement that information gathering, analysis and dissemination were important and valid tools for public health units.

Chapter summary

The key informant interviews[12] and the review of the documentary evidence showed a good understanding of the social determinants of health and within these the

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[11] Health Impact Assessment by which policies are examined and the consequences (both intentional and unintentional) are evaluated. This "provides decision-makers with information about how any policy, programme or project may affect the health and equality of people" (www.who.int/hia/en/).

[12] Throughout this research a distinction is made between the two different types of key informants. The term informant is used to refer to key informants from within public health units and commentator is used to describe individuals who are not employees of public health units.

important role of income within the public health unit informants involved in this research. Little evidence was found of programmes or projects to address income as a determinant of health within a public health unit setting. A number of informants from public health units suggested that more action needed to be taken regarding income as a determinant of health. One went so far as to suggest that income was being treated like the 'dirty determinant of health' by the public health community. That is, the determinant that no one wanted to address.

Government policies were seen as the primary drivers around poverty issues, with the greatest chance of gaining positive outcomes being through government action. The policies viewed by the key informants as having the most influence on poverty included those policies concerned with taxation and social welfare, both of which were considered highly political in nature. Any public health unit advocacy carried out to change or influence these policies would need to be taken with careful consideration of the unit's staff role as employees of government, being employed to carry out government policy.

It was suggested that a central role of public health units was in the collation, analysis and dissemination of information to support policies that would have a positive effect on public health through action on income. This evidence could then empower non-governmental organisations and other partners to more effectively advocate for policy change. A strong theme that arose from the interviews was the need for public health units to work collaboratively with other agencies as it was agreed that most of the solutions to poverty lay outside the health sector. This was highlighted by the collaborative approach between one public health unit and a Work and Income office, which saw positive outcomes from the cross-training of staff from both organisations. While this project did not intend to directly improve the income of beneficiaries, this was seen as an outcome through building understanding and knowledge among case managers with regards to the impact of poverty on health issues.

Debt reduction and control were highlighted as areas where little public health action has been focused to date, for example, creating closer relationships with agencies involved with gambling. Public health unit informants and public health unit strategic plans seldom mentioned gambling as a significant issue in relation to poverty, and none reported developing any initiatives to address it. This is possibly, at least in part, a result of the contracts associated with gambling as other agencies have been charged with addressing these issues.

The current focus of public health units within the education sector was seen to be around health and safety issues[13] and they were not felt to be taking a broader view on the public health impacts of educational outcomes. Education was seen as an important determinant of health and to have a strong connection to peoples ability to generate income and it was suggested that public health units should refocus some of their efforts on issues of access, quality and outcomes from the education system rather than outbreaks, hygiene and physical safety, although these issues have a place as well.

Ensuring that health 'gets its own house in order' was identified as an important first step in addressing poverty and income-related issues. This manifested itself in three key suggestions supported by a number of key informants:

- Ensuring that public health units had the right people with the right skills, knowledge and abilities to engage in complicated issues such as income.
- Giving greater consideration to the role that district health boards play within their own community and through ensuring that the district health boards' more vulnerable workers are treated well.
- Ensuring that the services that district health boards provide examine not only the health conditions which are presented but also give consideration to the underlying social conditions of the clients such as benefit entitlements, income and housing conditions.

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[13] Health and safety issues include, but are not limited to: investigation and control of disease, personal health of children, education on wellbeing and health, and the development of a culture of health within the school, home and community environments.

The following chapter discusses these results and draws links between the findings of the literature review, there is also discussion of the appropriateness of public health units engaging in work that seeks to ensure that people have access to adequate income. The strengths and weaknesses of this research are then explored and consideration given to some of the implications of this research for both future research and policy makers.

CHAPTER FIVE: DISCUSSION

This chapter explores the findings from the research and considers these findings in light of the evidence identified through the literature review. The discussion focuses on the range of income-related interventions that would be suitable for a regional public health unit to include as part of a poverty reduction programme. It then examines the strengths and weaknesses with this research, its implications for future research and the implication for policy.

Overview of research findings

The key informant interviews and documentary analysis found that there was a consistent approach by commentators and informants to the significance that the social determinants of health (including income) have on health outcomes, and that public health units had a role to play in addressing these. Some public health units have considered income in their planning processes, however only one public health unit had identified specific projects that addressed income-related issues. Other public health units that considered income as an approach decided to focus on other determinants of health or issues based programmes. The pressure to deliver on multiple programmes within constrained budget and resources was identified by the public health unit informants as one reason why public health units may not have considered income intervention. One commentator noted that the lack of action on income, even with good levels of understanding about its significance, has resulted in income being treated as an untouchable by many public health units, one that is acknowledged but rarely acted upon. This suggests that income has been placed in the too political and too hard basket.

There was a consistent view held by all key informants that government policies were key to improving incomes and reducing poverty. This frequently resulted in consideration of the role that a public health unit had in advocating for change and the broader issue of advocacy by government servants. There was hesitancy by informants to become too engaged in what was seen as highly political issues, such as income redistribution, taxation and social welfare systems. However, there was consensus among commentators that public health units should become more engaged

in advocacy and in raising debate about the effects of inadequate income. There was a general view that public health units could be doing more to link the evidence between health outcomes and the social determinants of health on a local and regional level and ensure that this evidence is used to foster debate about the full range of policies that impact on health.

Two public health unit informant interviews mentioned the development of position statements that would articulate their positions on specific issues affecting public health, as a basis for considered and consistent advocacy and action. Both public health unit informant interviews highlighted the problems with getting their organisation (the district health boards) to approve these positions, as a public health unit has no legal independent status. It is simply a service arm of district health boards. These public health units cited the politics embedded within the district health board structure as reasons for their slow progress.

A strong theme that arose from the interviews was the need for public health units to work collaboratively with other agencies outside of the health sector as it was agreed that most of the solutions to poverty lay outside the health sector. The majority of interventions discussed in the interviews focused on non-health agency action. There was a view that to achieve significant changes to incomes, action would need to be taken by these non-health agencies and that public health units would need to continue to work across the different sectors of government, such as social welfare, education and employment. While the majority of interventions were intersectoral in nature, several within the health sector were also identified. They included working within the district health board structure to effect a more holistic approach to healthcare that gave consideration to the opportunities that the health sector can have in improving and protecting people whose health could impact on their ability to generate adequate income.

It was suggested that a central role of public health units lay in the collation, analysis and dissemination of information to support policies that would have a positive effect on public health without engagement in direct advocacy. One suggested action was for public health units to develop partnerships with non-governmental organisations

and provide support through the development of an evidence base and public health analysis so as to support non-governmental organisations to advocate more effectively.

Given the high level of awareness among public health units informants about the determinants of health, which were frequently described as including both income and education, and the public health units strategic plans which often discussed a 'determinants based approach' it was interesting to note that the link between income and education was only raised by one public health unit informant and this was only raised in the context of providing training for community people in public health itself. The current focus of public health units within the education sector was seen to be around health and safety issues and they were not felt to be taking a broader view on the public health impacts of educational outcomes. Education was seen as an important determinant of health and it was suggested that public health units should refocus some of their efforts towards issues of access, quality and outcomes from the education system rather than outbreaks, hygiene and physical safety, although these issues have a place as well.

Ensuring that health 'gets its own house in order' was identified as an important first step in addressing poverty and income-related issues. This manifested itself in three key suggestions:

- Ensuring that public health units had the right people with the right skills, knowledge and abilities to engage in complicated issues such as income.
- Giving greater consideration to the role that district health boards play within their own community and through ensuring that the district health boards' more vulnerable workers are treated well.
- Ensuring that the services that district health boards provide, examine not only the health conditions that are presented but also give consideration to the underlying social conditions of the patients such as benefit entitlements and employment, thus taking into consideration some of the factors that may have led to the patients presenting with a medical condition.

Discussion comparing the results and the literature

Through the analysis of the key informant interviews, the documentary analysis and the review of the literature, it is apparent that the long-term solutions to the problem of insufficient income were not only access to adequate income itself but also the factors that enable and disable income-earning potential along with the macro economic position of the country and generosity in benefit entitlements. The factors that influence a person's ability to generate income may have a more profound impact on a person's life than the specific income that they receive at any given point within it. The proverb 'give a man a fish and he will eat for a day, teach him how to fish he will eat forever' is an appropriate analogy for this approach. Providing the tools that enable income earning potential e.g. education, will solve more problems in the long-term than simply sustaining the current need. While this approach may have greater ongoing beneficial potential, it is important not to lose sight of the current and immediate need to sustain people while these skills are acquired, especially as some of these skills are developed in the early stages of life and may take generations to take effect.

TAXATION

Governmental taxation systems were seen in the literature as having the potential to significantly affect income. They were also seen as a significant tool to address inequalities and as a tool for redistributing wealth from the rich to the poor (Acheson, 1998; Exworthy et al., 2003; Marmot, 2002; Robalino & Warr, 2006). While taxation policy was indicated in the literature as having a significant potential in addressing inadequate income, it was seldom raised by the key informants. The nature of taxation policy is highly political and thus makes it a difficult subject for engagement by a public health unit, which is a servant of the government. Any engagement by a public health unit would need to be managed carefully to ensure that it could not be seen as lobbying. There is opportunity to engage on this issue through the dissemination of evidence and information on the links between various different policy approaches and health outcomes. While this information may indicate which option has the greatest health benefit, it would need to stop short of advocating for a

specific policy. It is also questionable what impact a regional health public health unit might have on this type of policy at a central government level.

SOCIAL WELFARE SYSTEMS

The role of targeted versus universal benefits was raised through the key informant interviews. This was illustrated by the way that government pays a universal benefit to any person over the age of 65 (superannuation) regardless of need or other forms of income, while children may received targeted benefits (via their parents or caregivers) based on need and parental income. The advantages and disadvantages of universal benefits were discussed in the literature (Hoelscher, 2004; Liebschutz, 1999). There appears to have been a deliberate decision to provide universal benefits to some groups within society (i.e. the elderly) and not to others (i.e. children) as there is currently little debate or consideration of universal benefits for children even though the literature suggests that poverty in early years has a lasting effect on future life (Minujin et al., 2006). Beyond even this argument about who should receive universal versus targeted benefits, is the issue that requires important consideration of how these benefits are sized and what mechanisms are in place to ensure that they keep track with inflation.

Key informants identified a number of interventions that could be employed to assist in improving the rate of those eligible for benefits receiving the full entitlement through working with social welfare agencies and non-governmental organisations to identify and address issues within the current system. There is both anecdotal evidence and literature to suggest that the New Zealand benefit system has become complex, despite several attempts by governments over the years to simplify the systems involved (Howell et al., 2000). Literature suggests that the more complex a social welfare system becomes, the harder it is to administer and the greater the chance that eligible people who have a right to its services miss out (Eaton, 2004; Hoelscher, 2004; Howell et al., 2000; Liebschutz, 1999). One public health unit reported positive outcomes from the development of a stronger agency to agency relationship (between the public health unit and a local Work and Income office). This enhanced relationship led to a better understanding of each other's roles and functions and resulted in improved understanding by Work and Income case managers

of health related issues which anecdotal evidence suggested led to improved benefit uptake.

In New Zealand over the last 25 years, different government policy periods, frequently aligned to the dominant political party in power, have been credited with both a significant rise in poverty levels and a significant decline in poverty levels (Blakely et al., 2005; Conway, 2002; O'Dea, 2000; Perry, 2008). This relationship between policy and poverty is also supported in international literature (Commission on Social Determinants of Health, 2008) and together this provides a good indication that many of the solutions to poverty will also lie in government policy. The key informants viewed government level policy interventions as having the greatest likelihood of impacting on poverty. Both the literature and a number of key informants agreed that changes to central government policies, such as moving towards a more progressive taxation system or a greater redistribution of wealth to the poor would have a significant effect on the income of the poor. While regional public health units are unlikely to be in a position to influence the overall shape of these social welfare systems, there appears to be evidence to support regional/local interventions aimed at ensuring fair and equal full entitlements are received by all of those entitled.

DEBT

Personal and family debt was raised in the literature as being an important consideration when examining poverty as 'short-term' loans were used to supplement incomes. The literature suggested that the number of businesses providing high interest fringe loans ('payday loans') was a common feature in low income communities in New Zealand (Ministry of Consumer Affairs, 2006). In other countries, the loans that people were taking out were changing from occasional loans to chronic loans, thereby making high interest debt part of everyday life for these people (Stegman & Faris, 2003). It was suggested by two public health unit informants that 'payday loans' were also becoming an issue for New Zealand. However, none of the public health unit informants identified any work streams that addressed these debt-related issues. Given the recent changes to the national and international economy, there is likely to be greater unemployment and greater reliance on benefits within New Zealand. If past experience is anything to go by, this will have a disproportionate

effect on Māori, Pacific peoples and low income earners. It is foreseeable that this reduction in income among these communities will lead to an increase in the need for 'payday loans'. If New Zealand follows a similar path as reported in international literature, these short-term loans will become a continuing part of daily life for many if they are not already, therefore, further work is needed to determine how to best act to minimise the impact of peoples lives from this and other types of debt.

EMPLOYMENT AND EMPLOYMENT CONDITIONS

The literature strongly supported the argument that employment is an important determinant of health in its own right, but also as an important precursor to income generation (Commission on Social Determinants of Health, 2008; Hoelscher, 2004; Oxley et al., 2001). The key informants echoed these views with many pointing to New Zealand's recent history of reforms, unemployment and growth as evidence of employment's important role in poverty. While employment was highlighted as a key factor in poverty reduction, few interventions were suggested for public health units. There were only two suggestions made by key informants. One involved the development of a greater working relationship with the union movement, who were considered to have an important role to play in improving wages and conditions especially for low income workers along with influencing changes to the minimum wage. The second involves the consideration of the role that the district health boards could be playing in ensuring that they are good employers, providing quality jobs especially for those in lower paying positions within the district health boards.

The second of these points is a continuation of a point raised earlier regarding the need to ensure that before the health system and services begin advocating for better employment conditions, they need to 'practice what they preach' and ensure that they are modelling the behaviour they are seeking in others. It is important to note that the district health boards are significant employers within their locality and that while there are a large number of well paid employees within them, there are also a large number of people at the other end of the spectrum. One commentator suggested that 'health needs to get its own house in order' first before reaching out to look at others (Commentator 5). This is an important point and action should happen

both within the health system, to address pay and conditions of its vulnerable workers and outside of the health system, to strengthen overall employment conditions.

EDUCATION

Educational outcomes and length of time in formal education have both been shown to have a strong association with earning potential (Card & Krueger, 1994; Ferrer & Riddell, 2002). A similar theme was discussed during the commentator interviews and identified education as fundamental to achieving improved earning opportunities. The commentators that discussed education tended to focus on access, acceptability of education and equality in educational outcomes as areas of primary concern. Early childhood education was also highlighted as a key area for improvement by commentators. This focus on early childhood education appears to be supported by recent work published by the World Health Organization, who highlighted the need for quality early childhood education to be part of children's development (Commission on Social Determinants of Health, 2008). One commentator challenged public health units to take a wider view of their involvement in the education sector and move away from a disease and health based approach to considering the broader benefits that education can have on society. This suggested change in focus for public health units, from disease and safety to access and quality, challenges the basis upon which public health units currently engage with the education sector. This approach would be acting on the intermediary pathways that mediate on health status with regards to the inequalities framework (Ministry of Health, 2002b).

HEALTH SYSTEMS

A person's health status plays an important part in their ability to generate adequate income. If a person suffers ill health, their ability to work may be affected and thus their ability to earn income is affected. This can cause or accelerate a spiral into poverty. Of course this effect does not necessarily affect only the person who has fallen ill but also their family who may be called on to nurse and support the ill family member. This appears to be supported by evidence in the New Zealand Living Standards Report which noted that the number of life shocks and a person's poor health status appeared to affect their standard of living (Jensen et al., 2006). It was

suggested by some key informants that the effects of ill health, or needing to remove oneself from employment to nurse another, was a good reason to examine the role of public health units and their district health boards in mitigating these negative effects through their own actions and policies. One suggestion involved ensuring that health services provided effective referral systems to agencies that provide income support (i.e. Work and Income and the Accident Compensation Corporation), thus ensuring a patient's income is supported during periods of ill health or when caring for someone who is ill. This approach requires the health services to view a patient in a more holistic way than simply treating the specific health issue, but more importantly to consider the impact of ill health on income.

The reduction or elimination of cost barriers, such as primary health care fees, was also identified by key informants an important area in which public health units could become more active. The literature points to a person's health status as being a key determinant of their ability to generate income (Cumming et al., 2005; Delamonica et al., 2006; Organization for Economic Co-operation and Development (OECD), 2003). The idea around focusing some effort within the district health boards has merit and public health units are ideally placed to effect these changes given that they are part of the district health boards. Positive changes in district health boards to provide a more holistic model of care also has the ability to demonstrate willingness by the health sector to address these issues themselves rather than being seen as constantly engaging with other agencies. However, caution needs to be taken here as this approach should not blind the public health units to looking solely within the health system. Mitigation of the impact that poor health has on the wider determinants of health is considered an important part of the Ministry of Health intervention framework, see *Table 1* (Ministry of Health, 2002b).

The ability of public health units to effectively engage in the complex issues around the social determinants of health and the likely level of intersectoral action necessary to effect meaningful change was raised during the key informant interviews. Public health unit informants noted the need to up-skill their workforce to ensure they had not only the necessary skills and knowledge to effectively engage in addressing issues such as income across the different sectors, but also to develop and maintain credibility with those whom they are working with.

PUBLIC HEALTH ADVOCACY

One method of lobbying for change is through advocacy, which was highlighted as one of the three key tools of public health. Many of the commentators suggested that this tool was under-utilised in public health units and that they should consider taking a more proactive approach in advocating for better public health outcomes. Central to this theme was the level at which the advocacy was pitched, the target audience and the appropriateness of the advocacy given public health units are servants of the government. The literature also supports evidence based advocacy as a key public health tool (Kelly, Bonnefoy, Morgan, & Florenzano, 2006; World Health Organization, 1986).

Direct advocacy on issues such as reforms of the taxation or social welfare system is unlikely to be a central approach taken by public health units in addressing income and poverty as this would involve advocating for or against government policies, which is considered by some to be inappropriate as government servants. The role of public health advocacy as a specific tool of public health (World Health Organization, 1986) becomes 'clouded' by the discussion of what is and what is not 'appropriate' for those employed by government. Several key informants identified a role for public health units in monitoring and improving the awareness and responsiveness of those agencies associated with income especially in regard to social welfare benefits. This was also supported in the evaluation of the Work and Income Public Health Nurse Project (Project evaluation report, 2008).

There was a general awareness from key informants regarding the limitations around how far public health units could take their advocacy role within the political environment, given that they are effectively employees of the state and therefore employed to implement government policies. While public health units are bound by some limitations in the scope of their advocacy work (Ministry of Health, 2003a; State Service Commission, 2005), these are unlikely to be faced by the broader public health community. It was suggested that public health units could support other agencies in their work around advocating on these issues. An interesting difference emerged between the informants and commentators, with the commentators suggesting a more

aggressive approach to advocacy and the informants being more cautious. Two possible interpretations for this difference in approach could be that the public health unit informants were more risk averse than the commentators, or that the public health unit informants had a better appreciation of the limitations of working within the district health board structure. It is likely that both of these interpretations are true to an extent. The advocacy approach is consistent with the structural level intervention described in the reducing inequalities intervention framework (Ministry of Health, 2002b).

PUBLIC HEALTH INFORMATION, ANALYSIS AND DISSEMINATION

While the collection, analysis and dissemination of public health information is discussed separately from the section above on advocacy, they should be considered as being on the same continuum. The distinction made in this research stems from what is generally perceived as being an accepted role of public health units and what is considered a more debateable tool for public health unit action.

The interviews highlighted the role that evidence plays in informing and guiding the development of policy and as a tool for assisting decision makers to understand the implications of existing or proposed policies. To what extent public health units should become engaged in this type of advocacy was a much discussed point in the interviews, with commentators and informants both concluding that while direct advocacy toward politicians and the government was inappropriate, informing these groups with evidence was considered an important public health function. The underlying use of evidence to inform advocacy is a public health tool that is well supported in literature (World Health Organization, 1986).

SECTION SUMMARY

The primary factors that influence income can be found in the policies that a country chooses to adopt. Taxation, social welfare and employment policies appear to have the greatest effect on how income is distributed within an economy. Many of these policies are unlikely to be significantly impacted on by the actions of a regional public health unit. This does not, however, mean that action by public health units to

address income should not be undertaken. Public health units would be well placed to monitor, analyse and report on how these policies are impacting on the poor. These are important areas in which public health units can play an active part. There is also opportunity to influence how other sectors develop and implement policies that may impact on people's incomes, as well as within the health sector itself. For this to occur, public health units would need to develop their skill base to ensure that staff have the necessary skills to engage in this work.

Research strengths and limitations

A constraint on this research was the lack of literature on regional interventions to address income-related issues. While the literature review was systematic, no regional initiatives were found in published literature either internationally or within New Zealand. This is possibly more indicative of the emphasis that regional agencies place on delivering the interventions rather than on publishing the outcomes of the work. This argument was strengthened by the discovery of two public health unit evaluations of income-related interventions, neither of which was published. This lack of easily accessible published material focusing on regional interventions is one aspect that public health units themselves could address by ensuring that their routine work is published.

The constraints on the number of interviews that could be undertaken as part of this research and the selection method employed resulted in only a selection of public health units being contacted and interviewed. Best efforts, that included using the judgment of the author and the experienced Regional Public Health Advisory Group, were made to interview those public health units believed to be most likely to have considered income-related interventions as part of their public health unit service planning. It is possible that other projects not discussed in this research could be occurring around New Zealand.

A similar concern may also have arisen through the selection of the commentators, as commentators selected may have limited the range of opinions received. This was attempted to be controlled through the use of snowballing techniques during the public health unit informant interviews and other commentator interviews, and

through discussion with the supervision team and the advisory group, as discussed in the methodology chapter, see page 39. This process did result in five of the six commentators having a similar training background, that of public health medicine specialists. This presents an interesting problem in that while these people that were identified by the informants, the Regional Public Health advisors and the supervisor as being well placed to comment on the research question, they may also have held similar views given their similar training. Alternatively, this may be more reflective of the dominance of doctors in the senior echelons of public health in New Zealand. This issue was raised with the Regional Public Health Advisory Group and they considered it unlikely to have significantly biased the results. It is unfortunate that of the three people who declined to be interviewed, none were public health medicine specialists.

Being unable to enrol Māori commentators limited the ability of this research to include a Māori perspective. Because Māori feature strongly in the lower end of the income earning statistics and because they should receive special rights and protections under the Treaty of Waitangi, it was considered important to include a Māori perspective in this research. There is a large body of work that describes a Māori view of health which is holistic and interconnected, so this research may be seen as examining only part of the bigger picture of poverty and health. The approach of this research to focus specifically on the issues of income and how public health units could intervene, its intention was to provide only part of the evidence for how a public health unit could engage in the issues of poverty. It is important that this work is critically reviewed by Māori public health experts prior to its interventions being adopted, so that any unintended consequences for Māori can be mitigated prior to action being taken and that the needs of Māori are met. The process for how this review could take place has not been discussed with Regional Public Health but it should include a review of this report by Māori public health experts and incorporation of the TUHA NZ model into the development of any programmes to address income.

One strength of this research was its ability to identify and interview a respected Pacific public health expert. This provided some insight into some of the issues affecting this community that may have been different from those affecting other communities. This provided the opportunity to explore some of the specific issues

affecting the Pacific community that had not been identified in any of the other key informant interviews.

The open ended questioning style used during the interviews provided the opportunity to explore those areas of specific knowledge that the interviewees held. This interview style allowed for a rich and varied dataset to be compiled. One of the limitations of this is that the interviews frequently covered new territory that other interviewees did not cover. While this is in part the strength of this style of interview, it would have been valuable to re-interview the key informants and seek their input into the issues and discussion raised within the first round of interviews. However, this level of engagement with key informants was not considered in the development of this research, and nor would the time constraints of a dissertation allow this depth of research.

This research intended to use a key informant interview method to collect data from those people involved in public health units and from commentators. Ordinarily, this process would involve one-on-one interviews with the key informants. However, it rapidly transpired that the public health units, with only one exception, preferred to conduct these interviews in small groups, as discussed in the methodology section, see page 39. This resulted in key informant interviews becoming groups rather than individual interviews. This presented the research with both potential benefits and risks. The advantage of a group interview is that the participants can 'feed off each other' by building arguments and exploring issues in greater detail that might be expected with single key informant interviews – the analysis of the interviews tended to support this argument. A potential drawback of a group interview is that people may not feel comfortable responding to some questions in front of other staff (e.g. managers, senior staff, or subordinates) from their organisation. Given the range of participants that took part in the public health unit informant interviews, it is possible that this too was a factor, but it is difficult to determine the extent to which this may have occurred.

An issue that arose was the decision, or oversight, to not seek ethics approval for the interviews to be transcribed in full. This issue was overcome with selectively quoting interviewees' comments and is believed to have had minimal impact on the final

analysis of the key informant interviews. However, the full transcription of the interviews would have produced a richer dataset for analysis.

The research was conducted in association with Regional Public Health. This approach involves the conscious intention to feed the conclusions and recommendations of the research back into the operational programmes of Regional Public Health, other public health units and public health in general. This feedback mechanism involves a number of methods and processes including the establishment of the Regional Public Health Advisory Group. This group enabled greater discussion, dialogue and 'buy-in' from Regional Public Health as to the direction and outcomes of the research. The focus of this research was to identify appropriate income interventions that could be addressed by Regional Public Health. To achieve this outcome, the researcher will continue to work with Regional Public Health in the development of their income programme. Through the course of the interviews, all of the public health units indicated interest in receiving the outcomes of the research and one public health unit extended an invitation to the researcher to return to their service after the research was completed and run a seminar. There are also plans to attend national and international conferences at which the results of the research will be presented. Given that at the start of this section the need to see published papers from regional agencies was highlighted, it will also be an objective of this research to seek publication of not only a paper arising from this research, but to seek support from Regional Public Health to publish the results of any interventions implemented as a result of this research.

This research aimed used an action research methodology. It has been successful in developing and maintaining a strong relationship with those within Regional Public Health responsible for developing programmes to ameliorate the impacts that inadequate income has on health. While the research was still in its draft form has had been provided to Regional Public Health so that they could commence programme development work. However as identified in the methodology chapter the research was unable to examine how these programmes have been implemented and to analyse the outcomes from these interventions. While this was not intended to be a feature of this research it would perhaps provided a more complete implementation of the action research methodology.

The close working relationship may have introduced bias in the research. This was attempted to be mitigated through an acknowledgement from Regional Public Health that this research was conducted independently of the organisation and that while they may provide advice, the author was under no obligation to adhere to this advice. The independent role of the two supervisors was also important in maintaining impartiality for this research, as they maintained overall control of the research process. While all key informants were advised that their interviews would remain confidential to the research team the relationship between the author and Regional Public Health was disclosed to ensure an open an honest all key informants both in writing and at the beginning of all of the interviews.

Research implications

This research has highlighted a number of additional questions and opportunities for future research. As a priority, this research should be reviewed by a Māori public health expert to assess its findings and applicability to te ao Māori (the Māori world), and more importantly to highlight areas where Māori may be disadvantaged through the implementation of any of the recommendations contained within this research. An important consideration would be to ensure that any programme or intervention undertaken as a result of this research are evaluated, documented and published. This could provide important information to support any positive effects of income related interventions have on public health outcomes.

This research examined a range of documentation from public health units and district health boards – the majority of these documents consisted of strategic plans. The analysis of the informant interviews against these documents highlighted a potential divergence between what was contained in the strategic plans with regards to the organisations' approach to the determinants of health, specifically income, and the action on the ground. There is merit in examining the relationship between what is stated as the strategic aims of these organisations and how they are addressing and putting these strategies into action for other key determinants of health. This may be achieved through a review or audit of the district health boards' strategic plans, if this does not already occur within the Ministry of Health.

Advocacy has been identified as an important tool for public health units to address social determinants of health. The research found that public health units had a conservative view of how this tool should be used, while the commentators suggested that advocacy could be better used to address issues such as poverty and income. The research has also highlighted some of the discourse around the role of a public servant in advocacy, especially when this might involve advocacy towards government and politicians. In saying this there was far less concern raised about the dissemination of public health research and evidence to inform debate, in fact it was generally viewed positively, and this too can be considered a form of advocacy. It is clear that both of these are forms of advocacy but it is equally clear that there are very different perceptions about how they are used. These tensions have been demonstrated to exist between the use of the public health advocacy tool and the role of the government civil servant. New Zealand is unlikely to be the only jurisdiction to have faced this issue. To enable public health in New Zealand to gain greater clarity and to foster debate around the role of advocacy within public health units, it is recommended that further research be undertaken into how advocacy is used in New Zealand, drawing comparisons between how other similar jurisdictions had addressed these issues.

Policy and practice implications

There is good justification for income to be considered as an important public health issues and this research has demonstrated that there are effective roles that public health units could play in addressing it. However to do this public health units will need to give income related interventions due priority and ensure that adequate resources are identified.

Five general themes emerged for consideration by public health units including:

- Turning theory into action with regards to a determinants of health approach, specifically in regards to income.
- Increasing the breadth of public health advocacy in public health units.
- Strengthening the public health evidence, analysis and dissemination.
- Developing stronger interagency relationships and collaboration.

- Ensuring district health boards actively promote a holistic approach to health and wellbeing that considers the income needs of patients.

Public health units were challenged by several commentators to take a more active role in addressing the social determinants of health, and income was highlighted as one area that warranted further attention. The literature supports the significance of addressing issues around income, as adequate income has been shown to have a positive association with health outcomes (Benzeval & Judge, 2001; P Howden-Chapman & O'Dea, 2000). While this view was widely held, the implementation of these strategies into projects and programmes was less apparent. Public health units and district health boards should ensure that they are able to demonstrate that their strategic aims are being delivered within their organisations. An important first step would be clearly articulating the strategic aims of the organisation into evidence based position statements that the organisation as a whole could act on. The development of position statements will underpin any future advocacy work by providing an agreed view of any given issue. Without an agreed position on income, or any other matter, it is very difficult for a public health unit or its employers to advocate for particular outcomes as this relied heavily on the skill, experience and opinions of those undertaking the advocacy.

Most key informants agreed that advocacy was an important tool for public health. They also agreed that as public health units are part of the civil service and therefore places some constraints and limitations on the use of the advocacy tool. There was clear agreement that advocacy within the political environment was unlikely to be a role of a public health unit. Likewise there was agreement that the development and dissemination of public health evidence was appropriate for public health units. The debate focused on the gap between these two agreed positions. An interesting difference emerged between the informants and commentators, with the commentators suggesting a more aggressive approach to advocacy and the informants taking a more cautious approach. This raises important questions about how public health units use this well validated tool of advocacy. It may be useful to examine how other countries have approached this issue and to further discuss more explicitly within the New Zealand context, the role that public health units play in advocating. This lack of clarity regarding how advocacy can be successfully used may be a result of

the practical realities of being part of a government service provider or it may be more reflective of the need to re-orientate public health units to become more active in policy areas such as income and those factors that enable and disable people's income earning potential. Regardless of this difference, there remains a strong belief, backed up by the literature, that advocacy is a very important tool within public health. The current approach by public health units appears to be erring on the side of caution and 'playing it safe', risking an unhealthy stifling of debate. Public health units could re-examine their advocacy role and seek to become more active in debates and issues that have sound evidence on the effects on public health.

One of the limitations of this research was the inability to discover and review published literature on regional interventions either in New Zealand or abroad. This research has speculated as to why there was a lack of published material, especially given that a number of unpublished documents were identified through the key informant interviews. The publication of regional examples of interventions, regardless of their success, is an important aspect of continuing to build the evidence base for sub-national interventions affecting not just income but all aspects of public health work. There is great value not only to researchers but more importantly to other public health providers in having this work publicly available and where possible published in peer reviewed journals. To effect this change the public health units will need to consider placing greater emphasis on developing strategies and policies to ensure that their work is available

Public health advocacy via data collection, analysis and dissemination were identified by many key informants as important roles that public health units could further strengthen. The importance of a strong evidence base upon which good policy can be developed, was highlighted by key informants as a central role for public health. Key informants identified the need to further strengthen the public health evidence base and associated action on the social determinants of health, specifically those related to income, and that they had a key role in doing so within their own communities. Greater development and dissemination of this evidence would not only build a stronger case for change, but also provide advocates with additional tools to analyse income-related issues upon which to base advocacy decisions.

Interagency collaboration was seen by many key informants as being central to achieving positive change in ensuring people have adequate income and in reducing poverty. Several commentators identified the need for public health units to become more engaged with and develop collaborative relationships with other government agencies, non-governmental organisations and policy makers. For public health units to get their voice heard, it was suggested that they needed to increase their skill and knowledge base on the issues around income, policy making and the current policy environment. In doing so, they need to be more aware of the progress made to date by those already working in this field. To effectively engage with external agencies, public health units must have the right people with the right knowledge, good evidence upon which they are basing their opinions, and above all, the credibility and ability to gain the respect of those that they are working with, along with a consistent well thought out strategy for effecting intersectoral change. Public health units will need to continue to up-skill their workforce and identify and fill skill gaps if they are to make progress in this area.

District health boards themselves play an important role within their community. Not only are they responsible for the health of the population, but they also deliver many of the health care services within their geographic area as well as being a significant employer. Public health units are in a unique position to work within these structures to reorient delivery of health services to deliver better outcomes for population health. Two aspects were highlighted through this research for protecting and improving the income of their patients and families, and their employees. Firstly, through examining how the district health boards deliver services to patients and secondly, through how the district health boards care for their low income employees. Public health units could work with their district health boards to ensure that patients' income needs beyond those health issues that they present with are taken into consideration. The public health units could also be advocating for the district health board to develop policies that make it a model employer within its area especially with respect to its more vulnerable low waged employees.

This research has identified a number of areas that public health units could engage and intervene on income-related issues, although a number of issues have been raised

that will need to be addressed. On balance, public health units are well placed to take action on income and income-related issues.

CHAPTER SIX: CONCLUSIONS

Those things that determine health should be a focus of public health. Effective solutions to these will require skilled people using multi-faceted approaches. Public health should be wary of investing resources in small disconnected projects and programmes as there is a danger in focusing programmes too far away from the underlying determinants of health and missing these primary drivers altogether. Public health units should consider increase their skills and capacity to engage in more complex issues underpinning health, specifically, to effectively engage in addressing inadequate income, public health unit staff will need to have the necessary knowledge and ability to work with a wide range of people from across a broad range of sectors including education, social welfare, employers and decision makers.

Public health advocacy is an important tool for achieving positive public health outcomes. This research found that there was hesitance by some public health units as to how strongly they could or should advocate on issues such as income. This contrasted with the commentators who suggested public health units should take a more active role in advocating for positive public health outcomes, such as on income and income related issues. It is clear that further discussion and debate needs to occur on what role a public health unit has in advocating for public health issues such as income. However, it is unlikely that this debate will be confined to income-related issues alone, and that any discussion should consider the broader context of public health advocacy. Advocacy is a powerful tool and one that is recognised as a key public health tool. Public health units should embrace this tool and explore the limits of its use.

One form of income-related advocacy that the informants and commentators agreed on was the collection, analysis and dissemination of evidence to support good public health outcomes. Further, once the evidence has been collected and analysed, it will be important for the public health unit to form an opinion on the issues, thereby allowing its staff to communicate a consistent and informed position. It was recognised that some public health units have taken some steps to make this happen, however, for public health units to achieve effective outcomes, the emphasis on evidence must increase. There is limited value in simply collecting this evidence

unless it is made widely available to the broader community. Ideally, this should occur through peer reviewed publications, however, as this is time consuming and can be slow other methods of publication should be sought.

The social determinants of health are, for the most part, controlled by factors outside the health sector. To achieve change in these other sectors, health will have to work in collaboration with them. In the case of income, one key agency is Work and Income and public health units should seek to establish a working relationship with them and consider developing joint projects. There is little evidence that public health units are engaging in issues around debt, although some are recognising the potential public health impacts of it. There is a good rationale for public health engagement in the area of mitigating the effects of financial hardship caused by debt, especially high interest 'payday loan' debt, and this work should be done in conjunction with other agencies.

Public health units have had a long relationship with the education sector. Mostly, this relationship focuses around health and safety issues within educational institutions. This research has highlighted education as one of the primary issues behind people's ability to generate adequate income. Public health could consider their role in tackling education as a determinant of health and this may consider broadening their approach to education to take into account participation levels, quality and educational outcomes, and work with the education sector to identify mutually supportive strategies to address these problems.

Health sector in its own right plays an important role in ensuring people have adequate incomes. Public health units should consider examining their role within their own district health board and consider how they can effect changes that will have positive effects on the income of the people they have contact with. Health and health services may consider taking steps to ensure that they take a holistic approach when treating patients. This includes taking into consideration the implications that their treatment might have on their own income, or that of their family's and take the necessary steps to mitigate those effects.

Employment within the health sector is another issue that this research suggests deserves greater attention. The health sector, including district health boards, employ people at all levels of the income spectrum. The health sector has the ability to have a positive impact on those at the lower end of this spectrum, not only in terms of income levels but also in term of job stability. Many of the district health boards that participated in this research have indicated their understanding of the determinants of health and the importance of income. Putting this rhetoric into action, and setting a good example for actively engaging with other sectors, would be an important first step and would compliment those already working across these sectors.

CHAPTER SEVEN: RECOMMENDATIONS

RECOMMENDATION FOR NEW ZEALAND PUBLIC HEALTH UNITS AND REGIONAL PUBLIC HEALTH.

Emerging from this research is a number of recommendations for directed at Regional Public Health and many of these may be relevant and applicable in other public health units. It is strongly advised that prior to implementing any of these recommendations, this research is reviewed by Māori public health experts to provide opinion with regards to its applicability to Māori, and to identify recommendations that are most likely to benefit Māori or potentially have a negative effect on Māori.

It is recommended that:

- Public health units consider a re-evaluation their role in public health advocacy and ensure that a robust debate occurs with public health units and the district health boards to create greater clarity as to how a public health unit should be using this fundamental tool of public health advocacy. This discussion should include consideration of the wide range of methods of advocacy from information dissemination to political advocacy. Regional Public Health could consider the preparation and development of a discussion paper outlining their position on appropriate public health advocacy. This may include the processes for sign-off of service positions and the how's (mechanisms) and who's (target audiences) of appropriate public health advocacy.

- Public health units consider developing clear and agreed positions on key health issues, thereby allowing the public health units to clearly articulate and advocate for those issues. This will enable the staff across these organisation to have better understanding of the rationale and approach that the public health unit is taking on any given issue and more importantly clarity about the expectation that they will be advocating along the same lines. It is strongly suggested that any issue positions developed in one public health unit are shared and adopted within other public health units, as this will develop and maintain a consistent public health stance on these issues.

- Public health units continue to develop a focus on building evidence that demonstrates the links between income (and other social determinants of health) and health outcomes, and that this evidence is actually disseminated and published. This includes making widely available, documents produced by the public health unit. Regional Public Health should take greater steps to ensure that its documents, reports and evaluation are easily available to the public; in addition they should consider the publication of work in peer reviewed journals as a key action of their organisation.

- Public health units could consider the public health implications of fringe lenders and look to develop relationships with like minded agencies and to together develop an action programme to address these issues.

- Greater emphasis could be placed by public health units on working actively within their own district health boards to ensure that the district health boards are operating in a manner that is consistent with good public health. Specifically:
    - steps could be taken to ensure that patients are screened for potential income issues, and that appropriate referral processes are established to protect, improve and maintain these patients income
    - front-line staff are provided with the skills to enable appropriate screening of patients and that the concept of patient care is extended beyond the presenting conditions
    - ensure that district health boards seek to become model employers of those on low incomes and that they implement terms and conditions that make this a reality
    - ensure that district health boards take action to that enacts their aims and objectives incorporated in their strategic plans, especially in regards to addressing the determinant of health such as income.

- Public health units continue to build, develop and maintain the skills, expertise and credibility of their employees, to enable the public health units to be an effective advocate for public health and operate effectively across different sectors.

- Public health units seek to continue to develop interagency relationships. Public health units could establish or further develop joint projects and initiatives with Work and Income to provide skills and knowledge to both the case managers on health issues and to the health workforce to increase their knowledge of benefits and entitlements. Public health units could develop, or continue to develop, relationships with the union movement to support workers on low incomes.

- Regional Public Health could consider reorienting its approach to education away from addressing issues of health and safety to placing broader emphasis on the issues of access and quality, especially in regards to early childhood education.

REFERENCES

Abbott, S., Shaw, S., & Elston, J. (2004). Comparative analysis of health policy implementation - The use of documentary analysis. *Policy Studies, 25*(4), 259-266.

Acheson, D. (1998). *Independent Inquiry into Inequalities in Health Report*. London: Department of Health.

Asher, I. (1999). Poverty and Child Health: Background paper for Child Poverty Action Group. Retrieved 21 August 2008, from http://cpag.org.nz/backgrounders/1999-09_Poverty_and_Child_Health.html

Asthana, S., & Halliday, J. (2006). Developing an evidence base for policies and interventions to address health inequalities: The analysis of "public health regimes". *Milbank Quarterly, 84*(3), 577-603.

Barbor, T. F., Caetano, R., & Casswell, S. (2003). Alcohol: No Ordinary Commodity. *Research and Public Policy*.

Barrett, M., & Connolly-Stone, K. (1998). The Treaty of Waitangi and Social Policy. *Social Policy Journal of New Zealand* (11).

Beaglehole, R., & Bonita, R. (2008). Global public health: a scorecard. *The Lancet, 372*(9654), 1988-1996.

Benabou, R. (1996). *Inequality and Growth*. New York: C.V. Starr Center for Applied Economics, New York University.

Benzeval, M., & Judge, K. (2001). Income and health: The time dimension. *Social Science and Medicine, 52*(9), 1371-1390.

Blakely, T., Ajwani, S., Robson, B., Tobias, M., & Bonne, M. (2004). *Decades of Disparity: Widening ethnic mortality gaps from 1980 to 1999*. Wellington: Ministry of Health and University of Otago.

Blakely, T., Fawcett, J., Atkinson, J., Tobias, M., & Cheung, J. (2005). *Decades of Disparity II: Socioeconomic mortality trends in New Zealand, 1981-1999*. Wellington: Ministry of Health and University of Otago.

Blanden, J., & Gregg, P. (2004). Family income and educational attainment: A review of approaches and evidence for Britain. *Oxford Review of Economic Policy, 20*(2), 245-263.

Bushouse, B. K. (2008). *Early Childhood Education Policy in Aotearoa/New Zealand: The Creation of the 20 Hours Free Programme*. Wellington: Ian Axford Fellowships.

Card, D. (1999). The causal effect of education on earnings. In O. Ashenfelter & D. Card (Eds.), *The Handbook of Labor Economics* (Vol. 3 A). Amsterdam: Elsevier Science.

Card, D., & Krueger, A. B. (1994). Minimum wages and employment: a case study of the fast-food industry in New Jersey and Pennsylvania. *American Economic Review, 84*(4), 772-793.

Chadwick, E. (1842). An Enquiry into the Sanitary Conditions of the Labouring Populations of Great Britain.

Chapple, S. (1997). Do minimum wages have an adverse impact on employment? Evidence from New Zealand. *Labour Market Bulletin, 2*, 25-50.

Clark, H. (2008). Law change paves way for lower remittance costs. from http://www.beehive.govt.nz/release/law+change+paves+way+lower+remittance+costs

Commission on Social Determinants of Health. (2008). *Closing the gap in a generation: Health equity through action on social determinants of health*. Geneva: World Health Organization.

Conway, P. (2002). *The New Zealand Experiment 1984 - 1999*. Paper presented at the Global Policy Network Asia/Pacific Regional Meeting.

Corcoran, M. E., & Chaudry, A. (1997). The dynamics of childhood poverty. *Children and Poverty, 7*(2).

Cowley, E., Paterson, J., & Williams, M. (2004). Traditional gift giving among Pacific families in New Zealand. *Journal of Family and Economic Issues, 25*(3), 431-444.

Cumming, J., Raymont, A., Gribben, B., Horsburgh, M., Kent, B., McDonald, J., et al. (2005). *Evaluation of the implementation and intermediate outcomes of the Primary Health Care Strategy*. Wellington: Health Services Research Centre,Victoria University of Wellington.

Dale, M. C., & Wynd, D. (2008). *Social hazards*. Auckland: Child Poverty Action Group Inc.

Davidson, C., & Tolich, M. (2003). *Social Science Research in New Zealand: Many paths to understanding* (Vol. 2nd edition). Auckland: Pearson Education New Zealand.

Davies, H. T. O., & Crombie, I. K. (2001). What is a systematic review? *Evidence Base Medicine: What is...? series, 1*(5).

Delamonica, E., Minujin, A., Davidziuk, A., & Gonzalez, E. D. (2006). *Children living in poverty: Overview of definitions, meansurments and policy*. New York: UNICEF - Devision of policy and planning.

Durie, M. (1994). *Whaiaora - Maori health development* (Second ed.). Auckland: Oxford University Press.

Durie, M. (1998). Te Kawenata o Waitangi: The application of the Treaty of Waitangi to Health. In *Whaiora: Maori Health Development* (pp. 81-97). Auckland: Oxford University Press.

Easton, B. (2008). Does poverty affect health? In K. Dew & A. Matherson (Eds.), *Understanding Health Inequalities in Aotearoa New Zealand*. Wellington: Otago University Press.

Eaton, L. (2004). Committee calls for GPs to advise elderly patients on financial benefits (Vol. 329, pp. 132).

Exworthy, M., Blane, D., & Marmot, M. (2003). Tackling health inequalities in the United Kingdom: The progress and pitfalls of policy. *Health Services Research, 38*(6 II), 1905-1921.

Fawcett, J., Blakely, T., Robson, B., Tobias M, Pakipaki, N., & Harris, R. (2002). *Decades of Disparity III: Overlapping Ethnic and Socioeconomic Mortality Inequalities in New Zealand, 1981–1999*. Wellington: Ministry of Health and University of Otago.

Ferrer, A. M., & Riddell, W. C. (2002). The role of credentials in the Canadian labour market. *Le roÌ,le des certificats dans le marche du travail au Canada, 35*(4), 879-905.

Fletcher, M., & Dwyer, M. (2008). *A Fair Go for all Children: Actions to address child poverty in New Zealand*. Wellington: Children's Commissioner and Banardos.

Foote, C. L., Gerardi, K., Goette, L., & Willen, P. S. (2008). Just the facts: An initial analysis of subprime's role in the housing crisis. *Journal of Housing Economics, 17*(4), 291-305.

Francesconi, M., & Van der Klaauw, W. (2007). The socioeconomic consequences of "in-work" benefit reform for British lone mothers. *Journal of Human Resources, 42*(1), 1-31.

Freeman, R. B. (1996). The minimum wage as a redistributive tool. *Economic Journal, 106*(436), 639-649.

Frost-Gaskin, M., O'Kelly, R., Henderson, C., & Pacitti, R. (2003). A welfare benefits outreach project to users of community mental health services. *International Journal of Social Psychiatry, 49*(4), 251-263.

Graham, H. (2004). Tackling Inequalities in Health in England: Remedying Health Disadvantages, Narrowing Health Gaps or Reducing Health Gradients? *Journal of Social Policy 33*(1), 115-131.

Greenhalgh, T., & Peacock, R. (2005). Effectiveness and efficiency of search methods in systematic reviews of complex evidence: audit of primary sources. *British Medical Journal, 331*, 1064-1065.

Healy, J. D. (2004). *Housing, Fuel Poverty and Health: a Pan-European Analysis*. Aldershot: Ashgate Publishing, Ltd.

Hoelscher, P. (2004). *A thematic study using transnational comparisons to analyse and identify what combinations of policy responses are most successful in preventing and reducing high levels of child poverty*. Dortmund: European Commission, Director General Employment and Social Affairs.

Howden-Chapman, & Tobias, M. (2000). *Social Inequalities in Health: New Zealand 1999*. Wellington: Ministry of Health.

Howden-Chapman, P., Matheson, A., Crane, J., Viggers, H., Cunningham, M., Blakely, T., et al. (2007). Effect of insulating existing houses on health inequality: Cluster randomised study in the community. *British Medical Journal, 334*(7591), 460-464.

Howden-Chapman, P., & O'Dea, D. (2000). Income and Income Inequality and Health. In P. Howden-Chapman & M. Tobias (Eds.), *Social Inequalities in Health: New Zealand 1999*. Wellington: Ministry of Health.

Howell, G., Simmers, D., & Hackwell, K. (2000). *Still Missing Out: how welfare entitlement is denied*. Wellington: Downtown Community Ministry.

Hyslop, D., & Stillman, S. (2004). *Youth minimum wage reform and the labour market*. Wellington: Department of Labour.

Jensen, J., Krishnan, V., Hodgson, R., Sathiyandra, S. G., & Templeton, R. (2006). *New Zealand Living Standards 2004*. Wellington: Centre for Social Research and Evaluation, Ministry of Social Development.

Johnson, N. (2005). *'Working for Families' in New Zealand: Some early lessons*: Fulbright New Zealand.

Judge, K., & Paterson, I. (2002). Poverty, Income Inequality and Health. Treasury Working Paper 01/29. . Retrieved May 2008, from http://www.treasury.govt.nz/workingpapers/2001/twp01-29.pdf

Kelly, M. P., Bonnefoy, J., Morgan, A., & Florenzano, F. (2006). *The development of the evidence base about the social determinants of health*. Geneva: World Health

Organization, Commission on social determinants of health, Measurement and evidence knowledge network.

King, M. (2003). *History of New Zealand*. Auckland: Penguin.

Kunemund, H., Motel-Klingebiel, A., & Kohli, M. (2005). Do intergenerational transfers from elderly parents increase social inequality among their middle-aged children? Evidence from the German aging survey. *Journals of Gerontology - Series B Psychological Sciences and Social Sciences, 60*(1).

Liebschutz, D. S. (1999). *Taxes and Poverty in New Zealand: The impact of the tax and benifit systems on low-income New Zealanders*. Wellington: Ian Axford Fellowships.

Lustig, N., & Stern, N. (2000). Broadening the agenda for poverty reduction: Opportunity, empowerment, security. *Finance and Development, 37*(4), 3-7.

Mackenbach, J. (2002). Income inequality and population health. *British Medical Journal, 324*(1-2).

Macpherson, C. (1994). Changing patterns of commitment to island homelands: A case study of western Samoa. *Pacific Studies, 17*(3).

Manning, A., & Petrongolo, B. (2008). The part-time pay penalty for women in britain. *Economic Journal, 118*(526).

Marmot, M. (2002). The influence of income on health: Views of an epidemiologist. *Health Affairs, 21*(2), 31-46.

Marmot, M. (2005). Social determinants of health inequalities. *Lancet, 365*(9464), 1099-1104.

Marmot, M., Friel, S., Bell, R., Houweling, T. A. J., & Taylor, S. (2008). Closing the gap in a generation: health equity through action on the social determinants of health. *The Lancet, 372*(9650), 1661-1669.

Marmot, M., Ryff, C. D., Bumpass, L. L., Shipley, M., & Marks, N. F. (1997). Social inequalities in health: Next questions and converging evidence. *Social Science and Medicine, 44*(6), 901-910.

Marmot, M., & Wilkinson, R. G. (Eds.). (2006). *Social determinants of health*. Oxford: Oxford University Press.

Martin, J. (2004). *Missing the target? Special benefit policy and the health of low income New Zealanders.* University of Otago, Otago.

Ministry of Consumer Affairs. (2006). *Fringe lenders in New Zealand: Desk research project (July 2006)*. Wellington: Ministry of Consumer Affairs.

Ministry of Health. (2000). *The New Zealand Health Strategy*. Wellington.

Ministry of Health. (2002a). *He Korowai Oranga - Maori Health Strategy*. Wellington.

Ministry of Health. (2002b). *Reducing Inequalities in Health*. Wellington.

Ministry of Health. (2003a). *Contracts with Non-Government Orgnaisation - Compliance with public service standards*. Wellington.

Ministry of Health. (2003b). *Public Health Service Handbook 2003/04*. Wellington.

Ministry of Health. (2006). *A Guide to Developing Public Health Programmes: A generic logic model*. Wellington.

Ministry of Social Development. (2007). *The Social Report - 2007*. Wellington.

Ministry of Social Development. (2008). *The Social Report - 2008: te purongo oranga tangata*. Wellington.

Minujin, A., Delamonica, E., Gonzalez, E. D., & Davidziuk, A. (2006). *Children living in poverty: Overview of definitions, measurements and policies*. New York: Global Policy Section, United Nations Children's Fund (UNICEF).

Morrow, J. (2001). Neo-liberalism. In R. Mill (Ed.), *New Zealand Government and politics* (pp. 521-532). Melbourne: Oxford University Press

Mulitalo-Lauta, P. T. M. T. (2000). *Fa'asamao and social work within the New Zealand context*. Palmerston North, New Zealand: Dunmore Press.

National Advisory Committee on Health and Disability. (1998). *The social, cultural and economic determinants of health in New Zealand: Action to improve health*. Wellington.

Neumark, D., & Wascher, W. (1995). Minimum wage effects on employment and school enrollment. *Journal of Business and Economic Statistics, 13*(2), 199-206.

Neumark, D., & Wascher, W. (2000). Minimum wages and employment: A case study of the fast-fFood industry in New Jersey and Pennsylvania: Comment. *American Economic Review, 90*(5), 1362-1396.

New Zealand Public Health Association. (2002). Policy on taxation in New Zealand. Retrieved 6 July, 2008, from http://www.pha.org.nz/policies/phapolicytaxation.pdf

Nightingale, D. S., & Fix, M. (2004). Economic and labor market trends. *Future of Children, 14*(2), 49-59.

O'Brien, M., Wynd, D., & Humpage, L. (2008). *Work, families & poverty: Overview of social welfare reforms*. Auckland: Child Poverty Action Group Inc.

O'Dea, D. (2000). *The changes in New Zealand's income distribution*. Wellington: The Treasury.

O'Dwyer, L. A., Baum, F., Kavanagh, A., & MacDougall, C. (2007). Do area-based interventions to reduce health inequalities work? A systematic review of evidence. *Critical Public Health, 17*(4), 317-335.

Organization for Economic Co-operation and Development (OECD). (2003). *Poverty and Health*. Paris.

Oxley, H., Dang, T.-T., Förster, M. F., & Pellizzari, M. (2001). Income inequalities and poverty among children and households with children in selected OECD countries. In K. Vleminckx & T. M. Smeeding (Eds.), *Child well-being, child poverty and child policy in modern nations* (pp. 371-406). Bristol: The Policy Press.

Parliament of the United Kingdom. (11 & 12 Vict). *The Public Health Act 1848*. London.

Perry, B. (2002). The mismatch between income measures and direct outcome measures of poverty. *Social Policy Journal of New Zealand, 27*, 101.

Perry, B. (2004). Working for families: The impact on child poverty. *Journal of Social Policy, Ministry of Social Development, 22*, 19-54.

Perry, B. (2007). *Household incomes in New Zealand: Trends in indicators of inequality and hardship 1982 to 2004*. Wellington: Ministry of Social Development.

Perry, B. (2008). *Household incomes in New Zealand: trends in indicators of inequality and hardship 1982 to 2007*. Wellington: Ministry of Social Development.

Pirttilä, J., & Tuomala, M. (2004). Poverty alleviation and tax policy. *European Economic Review, 48*(5), 1075-1090.

Pomare, E., Keefe-Ormsby, V., Ormsby C, P., N, Reid, P., Robson, B., & Watene-Haydon, N. (1995). *Hauora: Māori standards of health. A Study of the Years 1970-1991*. Wellington: Te Roopu Rangahau Hauora a Eru Pomare.

Porter, D., & Craig, D. (2004). The Third Way and the Third World: Poverty Reduction and Social Inclusion in the Rise of 'Inclusive' Liberalism. *Review of International Political Economy, 11*(2), 387-423.

Public Health Advisory Committee. (2004). *The Health of People and Communities, A way forward: Public policy and the economic determinants of health*: National Health Committee, Wellington.

Rankin, K. (1997). A new fiscal contract? Constructing a universal basic income and a social wage. *Social Policy Journal of New Zealand, 9*, 55-65.

Reason, P., & Bradbury, H. (2001). *Handbook of Action Research: Participative Inquiry and Practice*. London: Sage Publications.

Regional Public Health. (2006). *Regional Public Health Strategic Plan 2006 - 2011* Wellington: Regional Public Health, Hutt Valley District Health Board.

Reid, P. (2005). Connecting health, people and country in Aotearoa New Zeland. In K. Dew & P. David (Eds.), *Health and Society in aotearoa New Zealand* (Vol. 2nd edition). Melbourne: Oxford University Press.

Ritchie, J. (2008). *The 20 hours free Early Childhood Education Policy*. Auckland: Child Poverty Action Groupd Inc.

Robalino, D. A., & Warr, P. G. (2006). Poverty reduction through fiscal restructuring: An application to Thailand. *Journal of the Asia Pacific Economy, 11*(3), 249-267.

Robson, B. (2008). What is driving the disparities? In K. Dew & A. Matherson (Eds.), *Understanding Health Inequalities in Aotearoa New Zealand*. Wellington: Otago University Press.

Robson, B., & Harris, R. (Eds.). (2007). *Hauora: Maori Standards of Health IV. A study of the years 2000-2005*. Wellington: Te Ropu Rangahau a Eru Pomare.

Rychetnik, L., & Frommer, M. (2000). *A Proposed Schema for Evaluating Evidence on Public Health Interventions*. Melbourne: National Public Health Partnership.

Rychetnik, L., Frommer, M., Hawe, P., & Shiell, A. (2002). Criteria for evaluating evidence on public health interventions. *Journal of Epidemiology and Community Health, 56*, 119-127.

Salmond, C. (1998). NZDep91:A New Zealand index of deprivation. *Australian and New Zealand Journal of Public Health, 22*(7), 835.

Sharples, P. (2008). 2008 Budget debate. Retrieved August 2008, from www.parliament.nz/...20080522_00000211-Sharples-Pita-Budget-Debate.htm

Signal, L. (2008). Tools for health equity. In K. Dew & A. Matherson (Eds.), *Understanding Health Inequalities in Aotearoa New Zealand*. Wellington: Otago University Press.

Signal, L., Martin, J., Reid, P., Carroll, C., Howden-Chapman, P., Ormsby, V., et al. (2007). Tackling health inequalities: moving theory to action. *International Journal for Equity in Health, 6*(1), 12.

Sinfield, A., & Pedersen, A. (2006). Child Poverty - A persistent challange *European Journal of Social Security, 8*(3), 229-234.

Solar, O., & Irwin, A. (2006). Social determinants, political contexts and civil society action: a historical perspective on the Commission on Social Determinants of Health. *Health Promotion Journal of Australia, 17*(3), 180-184.

St John, S., & Wynd, D. (2008). *Left behind: how social and income inequalities damage New Zealand children*. Auckland: Child Poverty Action Group.

State Service Commission. (2005). *New Zealand Public Service Code of Conduct*. Wellington

Stegman, M. A., & Faris, R. (2003). Payday lending: A business model that encourages chronic borrowing. *Economic Development Quarterly, 17*(1), 8-32.

Stephenson, P., Lane, L., & Field, A. (2008). *Keeping Well 2008-12 - Regional strategic plan for population health*. Auckland.

Tesh, S. N. (1995). Miasma and 'social factors' in disease causality: Lessons from the nineteenth century. *Journal of Health Politics, Policy and Law, 20*(4), 1001.

The New Zealand Government. (2000). *New Zealand Public Health and Disability Act 2000*. Wellington.

The New Zealand Government. (2007). *Social Security Amendment Act 2007*. Wellington.

The Treasury. (2005). *Briefing to the Incoming Government 2005 - Sustaining Growth*. Wellington.

Townsend, P. (1979). *Poverty in the United Kingdom*. Harmondsworth: Penguin Books.

United Nations. (1945). *Charter of the United Nations*. San Francisco.

United Nations. (1948). *Universal Declaration of Human Rights*. Paris.

United Nations. (2000). *Millennium Development Goals*. New York.

Vallgarda, S. (2008). Social inequality in health: Dichotomy or gradient?. A comparative study of problematizations in national public health programmes. *Health Policy, 85*(1), 71-82.

Wagstaff, A. (2002). Poverty and health sector inequalities. *Bulletin of the World Health Organization, 80*(2), 97-105.

Waldegrave, C., Stephens, R., & King, P. (2003). Gauging New Zealand's success at poverty reduction in the new millennium. *Australian Journal of Social Issues, 38*(4), 433(431).

Warren, T., Rowlingson, K., & Whyley, C. (2001). Female finances: Gender wage gaps and gender assets gaps. *Work, Employment and Society, 15*(3), 465-488.

Whitehead. (1992). The concepts and principles of equity in health. *International Journal of Health Services, 22*, 429-445.

Whitehead, D., Taket, A., & Smith, P. (2003). Action research in health promotion. *Health Education Journal, 62*, 5-22.

Whitehead, M. (2007). A typology of actions to tackle social inequalities in health. *Journal of Epidemiology and Community Health, 61*(6), 473-478.

Winslow, C. (1920). The untilled field of public health. *Modern Medicine, 2*(3), 183-191.

Winter, R., & Munn-Giddings, C. (Eds.). (2001). *Handbook for Action Research in Health and Social Care*. London: Routledge.

Woodward, A., & Kawachi, I. (2000). Why reduce health inequalities? *Journal of Epidemiology and Community Health, 54*(12), 923.

World Bank. (2008). PovertyNet, Understanding Poverty. Retrieved 20 August 2008, from http://go.worldbank.org/K7LWQUT9L0

World Bank, & International Monetary Fund. (2004). *Poverty Reduction Strategy Papers—Progress in Implementation*. New York: The World Bank and The International Monetary Fund.

World Health Organization. (1946). *Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference*. New York.

World Health Organization. (1978). *Alma Ata declaration on Primary Health* Alma Ata.

World Health Organization. (1986). *Ottawa Charter for Health Promotion*. Ottawa.

World Health Organization. (2003). *Global Health Challenges (2003), World Health Report*. Geneva.

World Health Organization. (2007). *Achieving Health Equity: from root causes to fail outcomes*. Geneva.

Wylie, C., Ferral, H., Hodgen, E., & Thompson, J. (2006). *Competencies at age 14 and competency development for the Competent Children, Competent Learners study sample*. Wellington: Ministry of Education.

APPENDIX 1: REGIONAL PUBLIC HEALTH ADVISORY GROUP

Regional Public Health agreed to establish an internal advisory group to assist with informing this dissertation and to align the final outcome of the dissertation with the needs of the service.

The advisory group consisted of:

- Helen Topham, Senior Public Health Advisor
- Sarah Widmer, Senior Research Advisor
- Dr Kirstin Lindberg, Public Health Medicine Specialist
- With Clare Aspinall providing input on an ex-officio basis.

A schedule of regular meetings was planned for critical milestones within the research. The group met three times during the course of this research, and as appropriate, their suggestions have been incorporated within the research. This is fewer meetings than was originally scheduled as it transpired that the number of formal advisory group meetings scheduled were not required, given the close working relationship the researcher had with the advisory group members.

APPENDIX 2: INTERVIEW SCHEDULES

2 July 2008

Informant Schedule

INCOME AS A DETERMINANT OF HEALTH IN NEW ZEALAND
AND A ROLE FOR REGIONAL PUBLIC HEALTH

Outline of interview

1. **Introductions**
   "Hello, my name is Toby Regan. I am a Masters for Public Health candidate with the University of Otago and am currently undertaking a research project for my dissertation. I have worked in the area of public health for the past 14 years and am currently working for Regional Public Health in Wellington. I am also involved in community based primary health and operate a small public health consultancy. This research has been instigated at the request of Regional Public Health to provide a greater evidence base to assist them plan their poverty / income work programme. This research aims to examine both national and international literature around income intervention strategies and to interview people both working within public health units and those outside of public health units that either have significant experience in public health or in social policy associated with income and poverty."

2. **Study Aims and Background**

3. **Questions** "What role could Regional Public Health have in contributing to a reduction in the impact that income has on health and wellbeing?"

4. **Informed consent** "Department of Public Health is aware of the general areas to be explored in the interview; however the Department has not been able to review the precise questions to be used."

5. **Interview Questions**

   - Does your service have a specific focus on social determinants of health?

   - What is your services' view on income as a determinant of health?

   - What strategies or planning activities has your service developed that impact on income as a determinant of health?

- What interventions or programmes has your service put in place that impact on income as a determinant of health?

- What opportunities do you see for addressing the issues around income as a determinant of health? What impediments do you see?

- What role do you see for public health units in addressing these issues, if any?

- Given limited resources, which interventions should public health units prioritise?

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12 August 2008

Commentators Schedule

INCOME AS A DETERMINANT OF HEALTH IN NEW ZEALAND AND THE ROLE OF PUBLIC HEALTH UNITS

Outline of interview

1. **Introductions**
   "Hello, my name is Toby Regan. I am a Masters for Public Health candidate with the University of Otago and am currently undertaking a research project for my dissertation. I have worked in the area of public health for the past 14 years and am currently working for Regional Public Health in Wellington. I am also involved in community based primary health and operate a small public health consultancy. This research has been instigated at the request of Regional Public Health to provide a greater evidence base to assist them plan their poverty / income work programme. This research aims to examine both national and international literature around income intervention strategies and to interview people both working within public health units and those outside of public health units that either have significant experience in public health or in social policy associated with income and poverty."

2. **Study Aims and Background**

3. **Questions** "What role could Regional Public Health have in contributing to a reduction in the impact that income has on health and wellbeing?"

4. **Informed consent** "Department of Public Health is aware of the general areas to be explored in the interview; however the Department has not been able to review the precise questions to be used."

5. Interview Questions

- Do you believe that income has a strong relationship with health outcomes?
- What do you see as the main problems / issues facing NZ with regards to income?
- What are the main barriers to addressing these problems / issues?
- What opportunities do you see for addressing these problems?
- What role do you see for public health units in addressing these issues, if any?
- Given that public health units have limited resources, which interventions should public health units prioritise?

APPENDIX 3: UNIVERSITY OF OTAGO ETHICS APPLICATION

ETHICAL APPROVAL AT DEPARTMENTAL LEVEL OF A PROPOSAL INVOLVING HUMAN PARTICIPANTS (CATEGORY B)

NAME OF DEPARTMENT: Public Health

TITLE OF PROJECT: The role of public health units in income interventions to reduce poverty in New Zealand: Advice for Regional Public Health (Wellington).

PROJECTED START DATE OF PROJECT: 17 June 2008

STAFF MEMBER RESPONSIBLE FOR PROJECT: Dr Louise Signal

NAMES OF OTHER INVESTIGATORS OR INSTRUCTORS:
Toby Regan – Public Health Masters candidate
Anna Matheson – PhD candidate

BRIEF DESCRIPTION OF THE PROJECT:
Disparities in socio-economic status exist within New Zealand. It has been demonstrated that those at the lower end of the socio-economic scale have higher levels of morbidity and a lower life expectancy (Blakely et al., 2005). Adequate income is widely acknowledged as one of the key determinants of health. It has been identified as a key area for public health action by the Wellington Regional Public Health (RPH) service during the development of their social environments programme and subsequent service restructuring. Toby Regan is currently employed as a Public Health Advisor in the Social Environments Team at Regional Public Health and is leading a project to identify evidence based income-related interventions to reduce poverty. Regional Public Health has formally agreed to support this work being conducted as part of this dissertation and have signed an agreement that provides

permission for this work to be published by the University. An advisory group has been established at Regional Public Health to provide advice and support for this study.

A critical literature review will be conducted to clarify the issues related to income as a driver of poverty within the Wellington region and will situate these issues in the international and national context. The literature will be examined in regard to interventions to reduce poverty through ensuring adequate income particularly from the point of view of public health units. The literature will be supported by up to 10 key informant interviews with people involved with poverty reduction initiatives within similar public health units along with documentary analysis from these services. Up to five critical commentators will be interviewed to provide an external perspective on the role of public health units. This dissertation will examine the range of effective intervention options that could be implemented by Regional Public Health (Wellington). It will include the production of the dissertation itself as well as a position paper for Regional Public Health with recommendations for future programme development.

Key questions that will be explored are:

- What is the role of public health units in relation to addressing income with respect to poverty reduction in New Zealand?

- What is the best approach for Regional Public Health in Wellington?

DETAILS OF ETHICAL ISSUES INVOLVED:

While this research is being conducted under the banner of the University of Otago, it also has the full support of Regional Public Health (Wellington), who has established an advisory group to provide advice and support with this project. Regional Public Health will write a letter of introduction to external agencies explaining their rationale for wanting this work done and the potential benefits to other public health units.

Key informants within public health units will be identified from the investigator's own knowledge of the sector along with that of the RPH advisory group and that of the supervisors. Subsequent key informants will be identified through previous interviewees (using a snowball technique). Critical commentators will be identified

through a similar technique and a strategic sample will be identified including academics, non-governmental organisations / advocacy groups, and those from the state sector (both current and ex employees) i.e. Ministry of Health, Ministry of Social Development, etc. People identified through these processes will be approached and a request will be made to interview them and obtain any relevant documentation.

The key themes relating to the role of public health units in interventions on income as a determinant of health will be explored in interviews. These include problem identification, current or planned projects, evidence for action and future development of determinants based interventions. In the case of the commentators, it will be their comments on these issues as they relate to the role or potential role of public health units.

Key informants and critical commentators will be initially contacted by telephone and followed up with a email with the attached information sheet. A consent form will also be sent and collected prior to the interviews (either in person or by mail or fax). Interviews will be conducted face-to-face where possible. Alternatively telephone interviews will be used. Interviews are not expected to last more than one hour. Interviews will be recorded as a supplement for note taking and recordings will be destroyed once they have been reviewed against the interview notes. Interviews will not be directly transcribed word-for-word but will be used to make corrections to the notes taken in the interviews.

This project involves an open-questioning technique where the precise nature of the questions asked have not been determined in advance, but will depend on the way in which the interview develops.

Anonymity of key informants and critical commentators is important to this study. No participants will be named and every effort will be made to ensure that participants cannot be identified.

24 June 2008

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INFORMATION SHEET FOR PARTICIPANTS

Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate, we thank you. If you decide not to take part, there will be no disadvantage to yourself of any kind and we thank you for considering our request.

Disparities in socio-economic status exist within New Zealand. It has been demonstrated that those at the lower end of the socio-economic scale have higher levels of morbidity and a lower life expectancy (Blakely et al., 2005). Adequate income is widely acknowledged as one of the key determinants of health. It has been identified as a key area for public health action by the Regional Public Health (Wellington) during the development of their strategic plan 'Keeping Well' and has, in part, driven the subsequent service restructuring.

This project will examine the range of evidence based intervention options available to Regional Public Health to address issues in relation to income as a determinant of health. It will involve the development of a position paper for Regional Public Health with recommendations for future programme development. This project is being undertaken as part of the requirements for a Masters of Public Health through the University of Otago.

This project aims to interview up to 10 key informants from selected public health units around the country, and up to five critical commentators from outside public health units.

Key informant and critical commentator interviews along with documentary analysis will be used to inform this research. The key themes relating to income as a determinant of health will be explored in interviews. These include problem

identification, current or planned projects, evidence for action and future development of determinants based interventions.

The interview should take no more than one hour. Your individual feedback will remain confidential to the research. None of your comments will be attributed to you personally and every effort will be taken to ensure that you cannot be identified in the report or subsequent documents.

This project involves an open-questioning technique where the precise nature of the questions that will be asked have not been determined in advance, but will depend on the way in which the interview develops. Consequently, although the Department of Public Health is aware of the general areas to be explored in the interview, the Department has not been able to review the precise questions to be used.

In the event that the line of questioning does develop in such a way that you feel hesitant or uncomfortable, you are reminded of your right to decline to answer any particular question(s) and also that you may withdraw from the project at any stage without any disadvantage to yourself of any kind.

The interview may be recorded to ensure that your opinions and responses have been correctly recorded in the interview notes. All recordings will be destroyed once they have been used to verify that the notes from the interview are correct. Interviews will not be directly transcribed.

The results of the project may be published and will be available in the University of Otago library. You are most welcome to request a copy of the results of the project should you wish.

The data collected will be securely stored. At the end of the project any personal information will be destroyed immediately except that, as required by the University's research policy, any raw data on which the results of the project depend will be retained in secure storage for five years, after which it will be destroyed. Dr Signal will take responsibility for doing this.

Reasonable precautions will be taken to protect and subsequently destroy data gathered by email. However, the security of electronically transmitted information cannot be guaranteed.

If you have any questions about this project, either now or in the future, please feel free to contact either:

Dr Louise Signal, Department of Public Health, University of Otago, Wellington, Ph 04-3855541 x6477 or email louise.signal@otago.ac.nz

Toby Regan, Public Health Advisor and Otago University Masters Of Public Health student, Regional Public Health, Ph 04-284-1828, or email toby.regan@huttvalleydhb.org.nz

This research has been approved by the Department of Public Health, University of Otago, Wellington. If you have any concerns about any aspect of the research please contact the Department on 04 3855541 ex 6040.

CONSENT FORM

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PARTICIPANT CONSENT FORM

I have read and understood the information sheet explaining this research.

- I have had the opportunity to talk about the research and ask questions. I am satisfied with the answers I have been given.
- I understand that my participation is voluntary and that I can withdraw from this research at any time.
- I understand that my participation is confidential and that every effort will be made to protect my anonymity.
- I know whom to contact if I have any questions about this research.
- I agree to take part in this research.
- I agree to allow the interview to be recorded.
- The data collected will be securely stored. At the end of the project any personal information will be destroyed immediately except that (as required by the University's research policy) any typed copies of the discussion at the interview on which the results of the project depend will be retained in secure storage for five years, after which it will be destroyed.
- The results of the project may be published but my name will not be mentioned in any reports.

Name: _____

Signature: _____ **Date:** _____

I would like a copy of the findings of the research to be sent to me after the research is completed. (Please tick the box that applies to you)

YES

NO

In order to send you a copy of the research could you please record your details below.

Name: _____

Address: _____