## Disability and Equity in Medicine and Public Health

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Kelly Alexandra Roe



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## Abstract

This thesis is a philosophical investigation into the notions of disability and equity in the context of medicine and public health in the hierarchical and competitive context of New Zealand. The first part of this thesis offers a descriptive analysis of the diversity of the phenomenon that is 'disability', 'equity' and 'equity groups' respectively. The second part of this thesis introduces the United Nations ideal of a goal worth pursuing – sustainable peace and security for all peoples. I consider several case studies of how the ideal may become lost in implementation. The last chapter focuses on pre-conditions for sustainable peace and security which allow for medicine and medical institution. I introduce the ideal of win-win co-operation as a game worth playing rather than the pursuit of unsustainable competitive advantage or the hierarchial position of 'you lose therefore I win' which results in 'lose-lose' outcomes and a world that is worse off for us all.

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## Introduction

While the topic of 'disability and equity' might seem important and interesting a trouble with it as a topic is that it is something of a mess. 'Mess' is being used, here, in the technical sense (see, for example, Conklin, J (2005); Ritchey, T (2013); Sun, J and Yang, K (2016)). There are a number of features of 'messes' and 'social messes' and controversy over how we should use those terms. The rough idea is that these kinds of problems arise from complex causal relations which include feedback loops which render the problem not amenable to traditional linear analysis.

Standard examples of messes or social messes include problems of health, inequality, climate change, and global food supply. Just as the notions of health and equality are messy, so too should we expect messiness from related notions such as disability and equity. These messy kinds of problems have also been described as 'wicked problems' where, for example, the formulation of an acceptable solution depends on the formulation of the problem, and where different stakeholders have different formulations of the nature of the problem. Some of these problems have also been described as 'super-wicked problems' as when, for example, the agents who are funded to work on solution are, by complex causal processes, the same as those who are responsible for the creation and / or persistence of the problem.

One response to the 'messiness' of some problems is to say that they are not appropriate topics for a work of this length. The idea is that a work of this length must employ a methodology whereby there is a traditional linear analysis. In the context of philosophy there must be agreement between the student and advisors and examiners as to what is 'given' and what is 'contestable' and the student must offer an argument where the 'given' is provided in support of or as reason to believe the 'contestable' and where the thesis results in a 'contestable' conclusion that represents an 'original contribution to the field'. The idea is that progress on the sorts of things that are acceptable conclusions are atomistic parts that, once accepted by the field, will somehow add up to progress on the 'messy' sorts of problems that people, industry, and governments are all interested and invested in. The problem, however, is that atomistic approaches often end up being reductionist approaches. One ends up working on something that bears only dubious relation to what one was originally interested in. For example, one may end up working on empirical facts about rates of immunisation instead of focusing on the vision of what a more equitable society would look like.

If this thesis appears to be messy because it does not offer a traditional linear progressive argument for a simple thesis statement that is because of the nature of the problem that this thesis is concerned with. This thesis is an honest attempt to portray something of the complexity and diversity of the phenomenon that is disability (chapter one), equity (chapter two) and the diversity of equity groups that have traditionally been considered (chapter three). The thesis then turns to the 'big hairy audacious goal' of the United Nations for peace and security in chapter four. Along the way I describe a number of case studies in how the ideology or aspirational goal appears to be lost when it comes to implementation in New Zealand. In the fifth and final chapter I consider the philosophical underpinnings of what is required for sustainable peace and security for peoples so we can understand the idea of equity for a diverse group of peoples as were introduced in chapter three.

In this thesis I talk of the institution of medicine and the medical institution.

While it may seem that I am thinking of the institution of medicine as a single thing (or as having a single centralised agency) it is instead that I intend it to be understood in the spirit of Searle's 1995 characterisation of various social institutions such as the financial institution or the institution of the university. I do understand that Medicine is, of course, comprised of a variety of medical schools, public and private hospitals, outpatient clinics, District Health Boards, and various New Zealand, Australasian, and International Specialist Training Colleges. We can make sense of the idea of a personification of the institution of Medicine as being comparable to the personification of the corporate institution of McDonalds with Ronald McDonald or the personification of the United States of America as Uncle Sam.

Chapter 1 starts us off with a descriptive analysis of the notion of disability. The standard line is that the 'bio-psycho-social' or the 'bio-psycho-socialspiritual' model is the best model or theory that we have because it incorporates more of the factors than, say, a biological model alone would, or a psychological model alone would. The idea is that more factors are likely to provide a more thorough or complete explanation and we need to be thinking 'yes, and...' rather than arguing for the priority of only one strand of thought. In this chapter I go beyond the standard line (while accepting the standard approach) by considering ideas from anthropology and evolutionary biology. I also go beyond the standard line by focusing more particularly on politics and economics which will develop into a central theme in this thesis.

Once politics and economics have been introduced, Chapter 2 continues the descriptive analysis by turning to considerations of equity. I consider how the notion of equity is used across different academic fields from philosophy and ethics, to law, to economics or financial accounting. I also consider horizontal equity between members of the same group, vertical equity between different groups, and issues of legacy, succession, or rightful inheritance. Instead of attempting to say what it is that all these notions have in common I introduce

the idea of our focusing on who the primary beneficiary of equity policies are supposed to be, or whose interests it is that equity policies are supposed to satisfy. We can see how different 'players' can have different interests in the name of equity and how moves towards equity in the interests of one group could further entrench inequities for another group.

Chapter 3 turns to a descriptive analysis of the notion of equity groups which involves our considering a variety or diverse range of groups that have been considered equity groups both overseas and in a NZ context so we can see something of the messiness involved in determining who is a member of an equity group and what sorts of equity groups there may be. This chapter introduces problems in determining the stabilizing mechanisms for group membership. This results in problems in determining who is and who is not correctly classified as being a member of what equity group. This descriptive background brings the issue of who the primary beneficiary is supposed to be to the fore since there is the concern that individuals may exploit equity group status for personal gain (e.g., by administering or managing additional funds that have been allocated in the name of equity).

Chapter 4 continues the themes of politics that were introduced near the end of Chapter 1 and that continued through Chapter 2. After a rudimentary investigation into disability and equity we are now in a position to consider the political organizations: The United Nations, the Social and Economic Development Council as an organization within the UN, and the World Health Organization as a nested branch of the Council. I turn to these because New Zealand is a member of the United Nations which confers obligations upon the New Zealand Government. These international bodies have things to say about health and disability (the subject of chapter one) and equity for people with disability (the subject of Chapter 2) though what they have to say has largely been ignored in New Zealand. In this chapter I describe how New Zealand has focused on understanding equity only in the context of Māori, where the grounding for this is the Treaty of Waitangi. As such, it has been hard for us to understand how there may be equity for groups other than Māori in New Zealand. The New Zealand Government, Ministry of Health, and District Health Boards have not been focused on realizing their commitment to the United Nations and World Health Organization aspirations particularly with respect to some health targets (e.g., reduction in waiting room times, and increased rates of immunization). It can be hard to see how equity policies that are supposed to benefit Māori, primarily, work towards increasing equity for Māori rather than entrenching inequity for Māori in the name of equity.

Chapter 5 discusses the theoretical underpinnings of the aspirational ideals that were introduced in the last chapter. The United Nations was formed in the aftermath of war with the intention of realizing conditions required for the sustainability of peace and security in the aftermath of World War II. The Treaty of Waitangi similarly arose from the desire to end war or conflict in the New Zealand region by realizing conditions required for the sustainability of peace and security, which included recognizing the equality of Māori subjects alongside British subjects and recognizing the sovereignty of Māori alongside the Crown. In other words, Māori are people, too, with the same human rights as everybody else. In this chapter, I argue that we can understand equity consideration as a form of co-operativity to work for mutual benefit rather than to merely co-ordinate self-interest where the real aim is to exploit the other for one's own benefit if one thinks one can get away with it. I consider a case study of the selection process for medical schools in New Zealand and raise issues around whether equity group status has to do with people not wanting the rules to be applied to them or whether equity group status has to do with people refusing to apply the rules to them when they think they can get away with it.

## Chapter 1

# Models of disability and ill health

There are a glut of notions used in and around medicine when it comes to articulating the subject matter. An incomplete list is an indicator: 'malady', 'illness', 'ill-health, 'abnormality', 'deficiency', 'defect', 'dysfunction', 'disorder', 'sickness', 'disease', 'injury', 'medical or health condition', 'pathology', 'medical or health issue', 'failure to thrive and / or to flourish', status as 'victim of an accident' and 'disability'. One might think that there are important differences in the phenomenon that is (or that should be) picked out by one or more of the terms above. For example, one might think that diseases are biological whereas disorders are behavioural, and disabilities are socio-economic. Or, one might think that there really aren't very important differences in the phenomenon that is (or that should be) picked out by one or more of the above terms because they all (roughly) point towards the same thing: The lack of health or the failure to attain good health.

In this chapter I will offer a non-exhaustive descriptive analytic summary of different causal factors or approaches that have been used singly or in combination as models of disability. The standard story is one where our understanding has progressed from the medical model (strictly conceived) to the bio-psychosocial model where the main virtue of the bio-psycho-social model is that it takes more causal factors into account. Sometimes the temptation has been to identify the medical model as the bio-psycho-social model. It is important to understand that the medical model (strictly conceived) was the biological strand more particularly and the psychological and social were subsequent developments. In this chapter I go beyond the standard story by briefly introducing ideas that point to causal contributions from a greater diversity of fields including biological anthropology, evolutionary game theory and strategic role enactment, spirituality and religion, several social theories, issues of political struggle, and economics. In this chapter the aim is not to argue for the primacy of any one of these fields for our understanding though the theme picked out in much of the remainder of this thesis is political. The aim is also not to provide an account of how these different causal factors interact in the production of the phenomenon that is of interest to us. Rather, the aim is to introduce the reader to something of the complexity or messiness of the phenomenon.

#### **1.1** Pre-medical models

While we may be inclined to think of life before medicine and medical institutions as being nasty, brutish, and short, there is evidence to the contrary. I will briefly consider pre-medical models of disease or disability before turning to the medical model.

#### 1.1.1 Biological anthropology

Bones preserve relatively well and healed but deforming fractures and developmental abnormalities provide evidence that early hominins cared for at least some of their people who would have had a hard time hunting and / or gathering in a community where that was the primary way of life (e.g., Fisk and Macho, 1992). While there is much we don't know about division of labour in particular cases (e.g., whether these earned their keep by keeping fire, cooking, making tools etc), we know that severely injured people who would have been unable to hunt and / or forage lived for a number of years post-injury which shows they were not simply left to die once they had outlived their usefulness as hunters or gatherers for the group. There has been some speculation that fire-tending might have been the first divison of labour in traditional hunter-gatherer societies and it might be plausible to think that differences in mobility, for example, could well have contributed to variability in behaviour resulting in the discovery of different sorts of things that turn out to be useful for the group.

There is also evidence of very well healed severe injuries that were either congenital or suffered very early on which shows that children, also, were not simply left to die if they appeared different (e.g., Oxenham, M., et al., 2001). It is possible that those who were different were marked out early as religious leaders, healers, or shaman for the group, or that differences in ability or mobility may have been a driver for division of labour for those who were unable to contribute towards hunting or gathering. There is, for example, some evidence that epilepsy and religiosity are linked due to some overlap of temporal lobe functioning. This seems to have some degree of intuitive plausibility if we consider seizures as an indicator of epilepsy and the overlap there seems to be with elements of religious experience such as around the notion of possession by demons or gods (see, for example, Brodtkorb and Nakken, 2015). The sense of conviction experienced by those with delusions has also been linked to religiosity where the later involves a conviction or certainty about the existence of god or gods (Pierre, 2001).

In this section, we considered how disability might be linked to difference and

why the difference might not necessarily be bad for the group, instead difference may have been a driver for division of labour and increasing social complexity.

### 1.1.2 Evolutionary game theory and strategic role enactment

A literature has developed around the issue of how it is that co-operation or altruism has evolved (e.g., Frank, 1988). The problem is that the most short term profitable strategy on interacting with others seems intuitively to be one in which an individual takes more than their fair share if they can get away with it. The issue is that co-operative (sharing) or altruistic behaviours always seem to fare worse for the individual than cheating, or defecting behaviours would where the agent pursues their own personal profits at the expense of both the other, and the collaborative enterprise. As such it is hard to see how co-operative or altruistic behaviours could come into being or be sustained in populations instead of being driven into extinction by the presence of cheating, or defecting behavioural strategies.

People have tried to solve the problem of the evolution of co-operation by getting clearer on the mechanisms that go into allowing or promoting it. For example, while it might seem that cheating or defecting strategies pay off the best in one-off interactions, the possibility of that individual being punished by others, or of being excluded from future interactions as the result of their behaviour, might be sufficient to enable co-operation to persist in populations where there are a number of cheater and defectors (e.g., Wubs, Bshary, and Lehmann, 2016).

While turning to longer-term pay-offs might seem appealing in the context of sustainability it is harder to see how it is satisfactory to explain development.

Evolution by natural selection is not goal-oriented and we can't explain the evolution of the eye from some initial state to some useful end state by way of middle steps that are worse than the initial state in the short term because of the greater utility to the creature later down the track once it reaches the goal of the fully formed eye. Rather, each of the middle steps needs to fare not overtly worse than the previous state to explain how it was that it was able to persist in competition with the previous state for long enough for the next state to appear on the scene.

This idea of pay-off structures may be relevant for illness, disease, or disability insofar as we think that this is appropriately modelled as a case where an individual does not contribute their share to society. A common view of disability is one in which people are unable to contribute as when, for example, people get disability benefits in return for not working. This inability to contribute is thought to explain why it is that there are significantly higher levels of unemployment for people with disability. If this is not the case then it might be that discrimination against people with disability is primarily responsible for their higher levels of unemployment. Regardless of whether the individual cannot co-operate or contribute (in the case of disability) or whether the individual chooses not to co-operate or contribute (in the case of at least some theories of psychopathy or criminality) the effect on co-operative society is the same. That is to say, it appears to be undermining. We should be concerned about a society in which the prevalence of disorder, disease, or disability becomes too high because we are dealing with a society in which co-operation is dwindling. We will see these ideas developed more fully in Chapter 5.

#### 1.1.3 Spirituality and religion

Abrahamic dietary restrictions may have helped populations stay well (e.g., prescriptions involving burning and washing rituals) and prevent illness (e.g.,

prohibitions of excess, and of eating certain items which may have passed disease, such as from eating the flesh of animals that are likely to infect humans with parasites). Failing to keep these religious doctrines or rituals might well have increased an individual's chances of becoming ill. There may well be something to the notion that illness was more likely to result from sin or moral failing when we understand factors surrounding those practices for those communities (e.g., Meyer-Rochow, 2009).

The story of Job, on the other hand, is a story not of sickness as punishment for sin, but as something to be endured as a test of faith by a basically upstanding person. As such, we have Old Testament scripture attesting to the idea that illness, disease, and other misfortunes are not always punishment for individual excess or vice. Churches have traditionally been in the position to distribute resources to those in need as people brought their resources to the church to be stored in physical structures. The notion of the church taking or redistributing part of that as tithing might be seen to be a sort of social insurance administered by Church organisational structures. Many religions have the idea of church tax or charitable donation to help those in less fortunate positions than themselves currently (e.g., tithing, zakat, daan, tzedakah). Priests and elders etc would have made decisions about who was a morally upstanding worthy recipient of aid compared to who was being punished for their sins since they controlled the resources. Now we have the idea of religious leaders as sources of authority where they are able to differentiate the disabled from non-disabled in virtue of their access to the will of God.

In summary, we have now seen some of the causal factors that have been appealed to in order to understand or explain disability or disease. I have considered them to be 'pre-scientific' partly because evolutionary and bioanthropological factors draw on an understanding of the human condition by understanding it in the context of our historical origins as members of small hunter-gatherer bands and partly in the context of more recent history with the primacy of the role of the church in the social organisation of at least some peoples as a more highly organised or larger scale form of social insurance. In this section I only briefly touched on strategic role enactment. I will return to this and a more formal game theory analysis in the last chapter of this thesis.

#### **1.2** Medical models

The medical model is typically introduced as someting of a straw-man view of disability by its critics who are keen to point out deficiencies, limitations, or problems with a focus on component processes of people such as physiological or bio-chemical causal pathways. The Medical model or component process model is typically characterised as being biological in focus and in characterising disease or disability as being, arising from, or being the result of breakdowns in organs or organ systems as discovered primarily by gross or macroscopic anatomy and physiology. We can consider this in the context of how people used to criticise medical curriculum for being overly focused on the scientific aspects and not focused enough on the social, environmental, behavioral, and personal experiential aspects. In this section I consider the medical model or medical models as being focused on these sorts of types of causal factors.

This medical or component process model is typically considered to be something of an advance on the spiritual model that we considered in the previous section because it is grounded in objective facts to be discovered by science rather than being grounded in the opinions or judgements on the moral standing of the person afflicted as had (arguably) been the case prior to Medicine. Instead of focusing on venereal disease as being the product of sin or vice, venereal disease is, according to the medical model, the product of exposure to a pathogen, for example. Progress was made in anaesthetics (pain relief and as a result: better surgeries), antibiotics, and immunisations (particularly the elimination of smallpox). The idea is that sickness, disease, disability is caused by breakdowns or disruptions to physiological, biochemical, genetic, or physical systems or components of organ systems (see, for example, Murphy, 2006, Chapter 4). The success of medicine and medical interventions were thought to be because of this focus on the scientific. This can be contrasted with 'medical' practices (not defined as medical in the way I am using the term) with respect to magic, voodo and snake oil salesmen. More modern advances in the medical sciences have resulted in more recent developments in microscopic anatomy or histology, microbiology, genetics, biochemistry and immunology. The focus is on the development of the physical or natural sciences of physics, chemistry, and traditional (e.g., non-ecological) biology.

#### **1.3** Social models

In the previous section we considered the medical model as being narrowly focused on proximal, typically lower level causes. Let us now turn to three broadly different strands or threads to the social model. The first is roughly an extension of the medical model to include some of the social and environmental causes of ill health. The second is the consumer led disability rights strand that focuses on the harm arising from the social and environmental causes of ill health and sources the major harms there rather than as the direct result of the medical, or component process affliction. The third is the more radical social constructionist view that results in theorists being eliminativists about a person being disordered (in the sense of saying they are not) or a condition being a disorder (in the sense of saying that it is not).

I will explain what is meant by eliminativism in Section 1.3.3. For now, let me just say that there is, of course, a difference between, for example, eliminating autism by aborting foetuses with a gene thought to be necessary and sufficient for autism; eliminating autism by teaching people with something along the lines of this gene to 'high five!' until they no longer meet diagnostic criteria; and eliminating autism by removing it from the *Diagnostic and Statistical Manual of Mental Disorders* and the *International Classification of Diseases Index* (e.g., to be replaced by 'autism spectrum'). It is this last notion of eliminativism that concerns us, here. Lastly, I will consider tensions arising from these three strands of the social model which has led to controversy and dissent amongst people with disability.

#### 1.3.1 Public health

In *Global public health: a new era* Beaglehole and Bonita define public health as 'the organized global and local effort to promote and protect the health of populations and reduce health inequalities' (Beaglehole and Bonita, 2009, pg., ix). They maintain that '[t]he scope of public health is broad and ranges from the control of communicable diseases to the leadership of intersectoral efforts to improve health. The key public health perspective is the populationwide approach to the prevention and control of health problems' (Beaglehole and Bonita, 2009, pg., ix). In doing so, they maintain that public health is population health and population health is concerned with inequalities of health. In the next chapter, we will turn to the issue of inequalities of health and the resources needed to attain health. For now, we will turn to how others have defined public health and the health of populations.

First year Bachelor of Medicine and Bachelor of Surgical Sciences students in New Zealand are required to take a course in either public health (Otago) or population health (Auckland). Both courses use the same, Australian textbook *Essential Epidemiology* (Webb, Bain, and Page, 2017) supplemented with lecture notes and additional readings / references. The preface of the text informs us that:

This book grew out of our collective experience of teaching intro-

ductory epidemiology both in the classroom and to distance students enrolled in public health and health studies programmes in the School of Public Health (formerly the Department of Social and Preventative Medicine and then School of Population Health), University of Queensland. It began life as a detailed set of course notes that we wrote because we could not find a single epidemiology text that covered all of the areas we felt were important in sufficient detail. (Webb, Bain, and Page, pg., xi)

The authors' focus is very much on the role of epidemiology for public health and health promotion purposes. The authors state:

Together, descriptive and analytic epidemiology provide information for all stages of health planning, from the identification of problems and their causes to the design, funding and implementation of public health solutions and the evaluation of whether they really work and are cost-effective in practice. As we discussed in Chapter 1, people talk about many different kinds of epidemiology, but ultimately almost all epidemiology comes back to the same fundamental principles; the only things that differ are the health condition of interest and the factors that might influence that condition. When we discuss the various study designs...' (Webb, Bain, and Page, pg., 105)

The focus on statistics and study design is not simply a New Zealand or Australian phenomenon. Students studying for the United States Medical Liscensing Exam are similarly informed that

A heterogenous mix of epidemiology, biostatistics, ethics, law, healthcare delivery, patient safety, quality improvement, and more falls under the heading of public health sciences. Biostatistics and epidemiology are the foundations of evidence-based medicine and are very high yield, (First Aid for USMLE step 1, 2019, pg., 255).

We also have a notion of health promotion. Green, Tones, Cross, and Woodall (2015) maintain that '[t]he term 'health promotion' has variously been used to refer to a social movement, an ideology, a discipline, a profession and a strategy or field of practice delineated by commitment to key values' (pg., xxiv). Despite this account of the breadth or wide ranging scope for public health, Turcock maintains that 'as in the story of the blind man examining the elephant, with each blind person describing the animal in terms of the part that they encountered, various sectors of our society have mistaken separate components of public health for the entire system' (Turcock, 2012, pg., 3). While we saw above that epidemiologists were keen to place their aspect as central, the public health literature itself claims that it is important not to leave epidemiology or an evidence base out of public health entirely as

All too frequently, health promotion programmes have been established on the basis of limited research, and implemented with little or no evaluation. As a consequence, many programmes have been established with poorly conceived and unrealistic objectives, and with no effective mechanism for management, quality control or monitoring. Such programmes are often doomed to failure, and even when 'successful', have not been capable of yielding supportive evidence to ensure their continued existence. (Hawe, Degeling, and Hall, 1990, pg.,5)

Public health has also been criticised by adopting victim blaming styles of educational campaign whereby contemporary issues of public health are attributed to individual behaviour 'such as poor diet, lack of exercise, unsafe sex and smoking, drinking alcohol and using other addictive substances' (Green, Tones, Cross, and Woodall, 2015, pg., xvii). The authors continue to state that:

interpretations of this sort tend to be associated with a biomedical discourse and a deficit model of health that equates it with the absense of disease, rather than more holistic interpretations of health that encompass positive well-being. Such attributions are clearly overly simplistic. Nonetheless, they are still potentially damaging with regard to public health practice as responsibility for unhealthy behavior, and therefore by implication health, becomes delegated to the individual. Health promotion has challenged such a narrow focus on behaviour and supported a more comprehensive analysis of the factors that influence health and well-being (Green, Tones, Cross, and Woodall, 2015, pg., xviii).

The authors state that 'for many, health education had become associated with attempts to persuade individuals to change their behavior and was criticized for failing to take account of the wider influences and, therefore, being victimblaming in orientation' (Green, Tones, Cross, and Woodall, 2015, pg., xxi-xxii). The authors maintain that proper appreciation of the socio-economic gradient to health (that those with less wealth also had less health) and inequalities in wealth distribution 'draws attention to the essentially political nature of health promotion. Rather than being a matter of individual responsibility, health therefore becomes an issue of social justice. The key to addressing health inequalities is to tackle the root causes, including economic inequality. The 'big issues' that are a threat to health at the global level include poverty and deprivation, discrimination and exploitation, and violence in all forms including terrorism' (Green, Tones, Cross, and Woodall, 2015, pg., xxii).

In the next chapter (Chapter 2) we will turn to these issues of inequalities in wealth and the resources needed to attain health.

#### 1.3.2 Disability rights

The rallying cry of the international disabled people's movement has been described as 'Nothing about us without us!' as people with disability have tired of having the course of their lives dictated to by others without their being properly consulted on the issue (Charlton, 1998). The disability rights movement is usually considered to have started with the idea of deaf culture. Here, we have the idea of a group of people with a language - sign language - advocating for their right to use their language to communicate and not be segregated or excluded because they are deaf (Durham, Brolan, and Mukandi, 2014). In deaf culture it a distinction is made between a person being 'deaf' when they are hearing impaired and 'Deaf' when they identify as being a member of deaf culture (see for example Berke, J, (2019)). Autism and autism spectrum advocacy groups and the autism rights movement have also campaigned for people with A/autism to be viewed as peoples who are different - rather than as individuals who are broken, defective, or wrong for not behaving in a way that is more in keeping with what is regarded by the majority to be normal or acceptable behaviour. The N/neurodiversity movement has gained momentum as a number of people have campaigned for them being different, but not necessarily worse because of their difference (Mcgee, 2012). Parents have also had a considerable role to play in advocating for their kids to be accepted in society, e.g., in cases of Down's Syndrome. Note that in Down's Syndrome the capitalisation comes from Doctor John Langdown Down who is credited as having first discovered it.

The main focus of the disability rights movement has been something along the lines of how disability arises from contingent features of our social environment rather than from anything intrinsic to the medical condition or issue that people have. For example it would be in keeping with this sort of approach to maintain that while it is true that deaf people cannot hear it is not the case that Deaf people lack communication skills since sign language is a language in all important respects. If people who can't hear have trouble communicating in this day and age given sign language and written language and so on, then this is a problem resulting from our society more than a problem within the hearing impaired individual.

#### **1.3.3** Social constructionism

We saw the public health view considered social determinants in a way that expanded upon the medical model by considering additional factors. We also saw that the disability rights view considers that the costs and harms of disability are less to do with medical dysfunction but are more social in focus. The disability rights movement may also be viewed as less of a supplement or extension to the medical model and more of an alternative to the medical model. The disability rights movement advocates that oftentimes the disabled people, themselves, are the sources of authority about what is good for them, or what it is that they need.

Social constructionism can also be debunking in a sense explained by Hacking (1999). For example, let us consider homosexuality as a condition that used to be regarded as a medical - psychiatric - disorder. People who had been identified as homosexuals (at least some of the time) could be involuntarily detained in psychiatric institutions and be treated, against their will, with medications and electric shocks and other treatments to try and cure them of their homosexuality. This was done to a number of people. Social constructionists about homosexuality say that we were wrong about homosexuality being a medical - or psychiatric - disorder. We used to think it was a disorder - but we were wrong. It never was and was incorrectly regarded to have been so.

Another debunking story along similar lines is the social construction of childbirth as a medical phenomenon. The idea is that we were wrong to consider pregnancy a pathology, to think that that the appropriate place to give birth is a hospital, to think that medical doctors are the relevant source of authority for natural childbirth (as opposed to surgical removal of the foetus). To this, we could add another debunking story of the social construction of the female sex or gender as being constitutionally a malformation of the male variant with less work capacity due to its tendency to be afflicted with this disease of pregnancy and childbirth.

It is important to note that the social constructionist does not deny that at least some people do engage in homosexual behaviour at least some of the time, that some women do become pregnant and give birth to children, that there are women. The social constructionist simply denies that these are medical conditions and denies that there is something objectively scientifically wrong or broken or malfunctioning about these individuals.

I interpret this latter line as a kind of eliminativism with respect to homosexuality. I will explain this by analogy. We used to think that there was this substance - phlogiston - that was responsible for transfer of heat between objects. We learned that while heat will form an equilibrium between objects there is no transfer of heat fluid and we have come to eliminate this notion of phlogiston or heat fluid from our scientific theories. Similarly, we used to think that there was a mental disorder - homosexuality - that was responsible for people sometimes engaging in sexual behaviour with people of the same gender as them. We learned (or have come to believe) that while some people do engage in sexual behaviour with people of the same gender as them sometimes this is not due to mental disorder. We have come to eliminate the notion of homosexuality as a mental disorder from our psychiatric (and clinical psychological) theories.

#### 1.3.4 Tensions for social models

Social models are sometimes viewed as empowering and other times viewed as disempowering for people with disability by people with disability and the peole who care for them. In this section I will consider some of the factors that contribute to the messiness of this issue. This discussion will pave the way for the political model or focus on disability that we will see introduced by the United Nations and World Health Organisation in Chapter 4.

The focus on social causal factors can be empowering because a medical diagnosis can help people feel as though their distress or problems are legitimated. Medicine typically commands respect and medical professionals may be seen as relatively powerful support people or allies to have onside to help people get the resources they need. On the other hand, the focus on social causal factors can be disempowering because a medical diagnosis can prevent people from living the lives they wanted for themselves. Medical diagnosis can result in people being involuntarily incarcerated and subjected to invasive procedures (e.g., given injections of medications or electric shocks, or even surgeries to their brain, for example) against their will. Medical diagnosis can result in people not being listened to with respect to what people want to do with the resources they have (e.g., as when an elderly person is diagnosed with dementia and their assets are ordered to be liquidated to fund the high care institution or hospital they have been court ordered to reside in for the rest of their days).

If one cuts off one's thumb, one cannot hold a sword and thus cannot be drafted to war when swords are the relevant technology. Medical Doctors have played a role in diagnosing people with conditions which exempt them from military draft e.g., 'flat feet'. Soldiers were diagnosed as suffering from shell shock or post-traumatic stress syndrome and these diagnoses were thought to be helpful to war veterans because it got them out of a situation they desperately needed or wanted out of and it gave them treatment options and more understanding responses from the public later in life. This might be thought to be empowering insofar as it served the interests of the people, but disempowering insofar as it did so only coincidentally on the doctor choosing to advocate for their patient's interests rather than their own.

Today, some people are required to get a note from their doctor if they take time off work for sickness. Their employer will not take their word for it (which is disempowering), but if they tell their doctor they are sick and their doctor writes them a note saying 'so and so saw me on such a such a date and told me they felt sick' the employer will accept this as confirmation of illness (which might be empowering of their interests). To say that this prevents people from lying about being ill is infantilising (thinking that people would lie about that) and also doesn't show appreciation of the point that if people are going to lie to their employer about their illness there is nothing to prevent their lying to their doctor about their feeling sick. Or, perhaps a person knows their home is unhealthy because it is too cold and humid but even though they mention this to their property manager or landlord the response is to be dismissive of the concern and inform tenants that since there is no shortage of people seeking accommodation they should move out. This is disempowering. Governments may be less likely to respond to citizens' complaints than to medical doctors' complaints when medical doctors can make a case that (for example) children's respiratory problems are likely exacerbated by living in unhealthy homes. Medical support for what is perceived to primarily be a medical problem might be more likely to result in government officials choosing to improve New Zealand building legislation or tenancy laws so there is incentive for landlords to improve them such that they are more in line with those found in developed nations. This might be empowering of their interests, but perhaps not for the right reasons.

Medical paternalism might be a good thing for people who are diagnosed with a medical condition. Medical doctors may be able to help people make a case

and to provide the weight of Medicine and the Medical institution and expertise to the situation. On the other hand, medical paternalism might not be a good thing for people who are diagnosed with a medical condition when it results in taking power away from the individual. For example, individuals who are diagnosed with certain conditions like schizophrenia, borderline personality disorder, substance abuse, are often thought to be given a life sentence which effectively prohibits people from recovering or forever being accepted as having recovered by society. This is because these conditions are thought to be chronic and intrinsic features of the person that can never be overcome. Part of the controversy over alcoholism compared to substance abuse diagnoses was that alcoholism was (it was taught by alcoholics anonymous) a chronic disease that a person never recovered from whereas substance abuse was a description for a behavior. A psychiatric (medical) diagnosis of one of these conditions might be as effective (or even more effective) in preventing a person going on to a professional career than if they had been not only charged but actually convicted with criminal activity involving serious misuse of power (e.g., sexual offending or violence against children).

People with medical diagnosis and people seeking medical diagnosis for themselves or people they love may be divided about medicalisation. On the one hand, medicalisation and medical support might be seen by them to be the best or only way they have of potentially getting the things that they need. On the other hand, medicalisation and medical 'support' might be seen by them to be what is preventing them from potentially getting the things that they need. Some people hope for medical cure and fear allied health professionals taking control or other non-health government or non-government agencies. For example, a person may hope medication will prevent their binging on alcohol and prefer this line of approach to being given a life-sentance of AA meetings by the courts where treatment involves personal disclosure to rooms full of people, admission of weakness, and belief in a higher power. In sum, in this section I have introduced the social model and something of the messiness of considering social factors in models of disability. Firstly, we might view social or environmental factors as being considered alongside the scientific as an enrichment or development or extension of the medical model where medical models are conceptualised as being focused primarily on the scientific aspects of organs, organ systems, and the biochemical and physical processes of their components. Secondly, we might view social or environmental factors as driving out the medical factors when it comes to understanding the primary cause or driver behind the production and / or maintenence of the phenomenon of disability. Thirdly, we might consider the social factors are so very important indeed that medicine and the search for medical causes and explanations is undermined (as in the case of the 'disease' of womanhood, childbirth, or homosexuality).

#### 1.4 Economic models

We do not usually hear of the 'economic model of disability' or 'economic models of disability' but it is economic considerations that seem to be the primary driver behind the notion of 'Disability Adjusted Life-Years' or DALYs criteria that is sometimes appealed to by management or administration when it comes to decisions around resource allocation, particularly in the public sector (see, for example, Wilker and Marchand, 1998). The idea is roughly that the notion of 'disability' in the DALYs criterion is something along the lines of the notion of a deficiency when it comes to the attainment of health and that we can quantify this for the purposes of resource allocation and understanding the cost of disability in society.

The World Bank has commissioned Global Burden of Disease studies since 1990 where there is an attempt to quantify the health effects of different diseases and injuries with respect to morbidity and mortality by age, sex, and region. The notion of a disability-adjusted life year (DALY) was invented as a new metric to quantify the burden of disease, injury, or risk factor. Once we have a metric for the 'burden of disease' we can then look at the efficacy of various treatments or interventions and then calculate (for example) such things as the costeffectiveness of various interventions. DALYs are calculated by taking the sum of years of life lost due to premature mortality (YLL) + YLD, where YLD is the years (of healthy life lost) due to disability. The latter is meant to be a measure of the burden of living with a disease or disability. We can also consider the notion of disability weight (DW). For example, the disability weight of deafness in 2010 was 0.167-0.281 whereas the disability weight of blindness was 0.195 while Alzheimer's and other dementias was 0.666 (World Health Organisation, Department of Health Statistics and Information Systems, 2013).

There is a concern that DALYs criterion may be used to discriminate against people with disability. For example, people who are deaf may not be placed on transplant lists (or ever make high enough ranking to obtain transplant) because their life after transplant will always be DALYs ranked lower than an individual who is comparable in every other way - except that they can hear. A person with disability will always be DALYs ranked lower than a person without disability. A person with disability will always be discriminated against in virtue of their disability in a system where DALYs criteria are used to decide issues of health resource allocation.

An alternative to DALYs criteria that can be used for the purposes of resource allocation or healthcare rationing is a consideration of what issues are clinically relevant. Hearing impairment is not clinically relevant to the issue of liver or heart transplant. The surgical team isn't likely to have a worse result in virtue of the recipient being deaf. On the other hand, it is clinically relevant that a person has high blood glucose or high blood pressure because these are likely to impact on the surgery or recovery from surgery. This is not an issue of discriminating against people on the basis of their disability (diabetes or a vasculature condition) it is about consideration of what is and is not likely to produce the desired result of a good recovery from the operation and reintegration back to previous life. Haplotype matching is also under-utilised it would be possible to be fussier about prioritising the best haplotype match. See, for example, Kumar, Abbas, and Aster, 2015 pg., 234. Again, we don't need to discriminate against 'alcoholism' when it comes to liver transplants, we can focus on drinking behaviours. We need not discriminate against people on the basis of disability. We will go on to consider why it is that people seem determined to discriminate against people with disability. By way of preview doing so serves the interests - narrowly conceived - of those doing the discriminating.

Since this is the first time that we have considered discrimination now might be the most appropriate place for us to consider there to be two related but different notions or uses of 'discrimination'. Firstly, there is a thin or narrow sense in which discrimination is the activity of distinguishing between two things. We can think of people's ability to discriminate different flavors of ice-cream, for example, or different colours of skin. Secondly, there is a thick or normative sense in which discrimination is (analytically) wrong. This second reading comes from the notion that people are discriminating against or selecting against people on the grounds of or in virtue of differences that are not or that should not be relevant to the purpose to which the discrimination is being made. For example, if we are selecting which applicant should obtain a rental house in a particular neighbourhood, a bank loan, an insurance premium price, entry to a school program, a offer of employment then most people have the intuition (nominally, at least) that skin colour, gender, race, height, make of one's first car are factors about persons that are not or that should not be relevant for the purposes of selection.

I do not wish to consider DALYs in much more detail. More particularly, I do not wish to become enmeshed in the standard ethical dialogue with the

standard terms of the debate as outlined by (for example) the Stanford Encyclopaedia entry on 'Disability and Health Care Rationing' (Bickenbach, 2016), or what many standard bioethical textbooks have had to say on the issue of healthcare rationing (e.g., Parks and Wike, 2010, chapter 3). It seems to me there are various contestable assumptions that are required to be made in order for us to find ourselves in this mess of a problem of resource allocation that is the primary rationale for the economic model of disability (or the model of disability that results from our primarily being concerned with problems of resource allocation the way the problem of resource allocation is standardly considered. More particularly, we are required to believe that the resources needed to attain health are finite and there will never be enough to meet demand for them. This has become a standard assumption of economics, for example the AP Economics course description states 'The study of microeconomics requires students to understand that, in any economy, the existence of limited resources along with unlimited wants results in the need to make choices. An effective AP course, therefore, begins by introducing the concepts of opportunity costs and trade-offs' (College Board, page 6) and 'A macroeconomics course introduces students to fundamental economics concepts such as scarcity and opportunity costs' (College Board page 22).

When we apply the above economics assumptions to things like employment, housing, and health, we can understand how an organisation may think that an appropriate 'big hairy audacious goal' for them is to work to grow their business by increasing rates of unemployed people, homeless people, and people with disability. If a population believes that it is inevitable that some people in their society will miss out on attaining the resources they need then a population is encouraged into thinking that life is a competitive situation where attaining the things one needs / wants inevitably involves other people having less than the resources that they need / want. This can be contrasted with a view (as we will consider in Chapter 3) whereby the main problem behind people missing out on the things they need is issues of maldistribution, so, for example, two families can both miss out on the resources they need when one needs a big house and another needs a small house and resources have simply been misallocated due to a needs assessment that had both families persuaded into believing 'we can't always have the things we want and there simply aren't enough houses to go around'.

The 2013 census in New Zealand resulted in rates of disability at 24 per cent. That is nearly one quarter of our population. The standard economic assumption is that while it might be a nice ideal that these people get the treatment they need, or the resources they need, there never will be enough to meet demand where demand is a list of all the things they say that they want particularly when some other agency such as a District Health Board or Health Insurance Company is paying the bill. In the next chapter (Chapter 2) I will turn to what I see to be the major question: If there isn't enough to meet genuine need - then where does the money go, then? Before I do, let's recap what we have covered in this chapter.

In this chapter, we have looked at different theories of disability. We started out looking at pre-medical biological anthropology models where disabled people were present in society which suggests they were cared for, and we considered how they may have contributed towards the productivity of their society in part by encouraging or necessitating the division of labour into more specialised roles that are more limited in scope than generalised hunting and gathering. We looked at evolutionary game theory and strategic role enactment perspective where disability was (alongside criminality and sociopathy) modeled as a kind of non-contributor. We then looked at spiritual and religious views which ranged from blaming the disabled for their misfortune / non-contribution to viewing disabled people as the victim of misfortune to revering disabled people as prophets or seers.

We then turned to the medical model (narrowly conceived) and then swiftly to social models which seem mostly concerned with source of power when it comes to people with disabilities getting the things they (or their carers) need or want (or need or want on their behalf). We ended up briefly considering utilitarian economic models that are often employed in resource allocation settings and introduced the idea that these models rely on our buying into the idea that the resources needed to attain health are not abundant enough for all to have genuine need met.

We are now in the position to consider whether the issue is that there isn't enough - or whether the issue is that we are distributing things in ways that are not good for many of our people. Let us now turn to this issue in Chapter 2.

## Chapter 2

## Inequality and inequity

In the last chapter, we saw how a strand of public health recognised the socioeconomic gradient to health (that lower levels of health was associated with lower levels of wealth). In this chapter, I will consider inequality between countries, and inequality within the country of New Zealand. The aim is to re-present the literature rather than to undertake an independent statistical analysis. In this chapter I introduce public health to some of the evidence and literature that has accumulated within sociology and law in New Zealand that inequality is increasing and that overall New Zealand is doing worse on the world stage than other countries. While this picture of New Zealand as an inequitable society has been the dominant paradigm within some fields, it has not been the dominant paradigm in recent years in economics or in public health. I focus on inequality of income, wealth, and resources needed to attain health with a particular focus on access to healthy housing. I maintain that the extent of inequality in New Zealand (where people struggle to meet basic needs) is inequitable.

#### 2.1 Present inequality

There is much inequality in the world. There is inequality both between different countries, and within a single country. In *The world development report* 2006: Equity and development The World Bank describes both issues, vividly, by introducing us to three individuals born on the same day, and describing the differences in their life chances (2005, pg., 1-2). Let us meet these three individuals:

Nthabiseng: Black, born to poor rural family, 700 kms from Cape Town to a mother with no formal schooling.

Pieter: White, born to wealthy rural family in Cape Town to a mother who completed college degree from prestigious university.

Sven: Born to average Swedish household.

Of course, these aren't particular people. Rather, they, they are descriptions of people who vary on a number of parameters (born in South Africa vs Sweden, born in Rural vs Urban South Africa, Male vs Female, Black vs White, level of educational attainment of mother). Classification of people on the basis of such parameters allows us to group them with 'like' individuals such that we can predict their life chances. For example, to say that Nthabiseng has a 7.2 per cent chance of dying in her first year of life, is to say that, on average, of all the individuals like Nthabiseng (in certain respects), 7.2 out of 100 individuals in that group will likely not make it past their first birthday.

#### 2.1.1 Between countries

The World Bank (2005, pg., 1-2) describes the life chances that may be assigned to the above individuals on the basis of their circumstances: [Sven's] chances of dying in the first year of life are very small (0.3 per cent) [compared to 7.2 for Nthabiseng and 3 for Pieter] and he can expect to live to the age of 80, 12 years longer than Pieter, and 30 years more than Nthabiseng. He is likely to complete 11.4 years of schooling - 5 years more than the average South African... in the eighth grade, Sven can expect to obtain a score of 500 on an internationally comparable math test, while the average South African student will get a score of only 264 - more than two standard deviations below the Organisation for Economic Cooperation and Development (OECD) median. Nthabiseng most likely will never reach that grade and so will not take the test.

The Commission on Social Determinants of Health Report (2008, preamble) paints a similar picture of differences in life chances with respect to geographical country of birth:

Our children have dramatically different life chances depending on where they are born. In Japan or Sweden they can expect to live more than 80 years; in Brazil, 72 years; India, 63 years; and in one of several African countries, fewer than 50 years.

These data sets illustrate to us that there is much inequality in the world.

#### 2.1.2 Within a country

We saw, above, that the life chances for Nthabiseng was different, and very much worse, than the life chances for Pieter, even though they were born in the same country. With respect to inequality within New Zealand, there has been much reluctance to face up to inequality, however. My aim in this chapter is not to offer any kind of independent argument or statistical analysis. It is merely to convey something of the analysis that has been offered by others so that we are better placed to see that inequality is a problem in New Zealand, and it appears to be getting worse.

Kelsey concludes how:

During the late 1980s New Zealand became notorious for having one of the biggest and swiftest surges in inequality in the Western world... Neoliberalism fractured society, deepened poverty and worsened social vulnerability (Kelsey, 2015, pg., 86-87).

Rashbrooke relates how:

Rising income inequality in many developed nations has been a source of growing international concern... the *Global Risks 2013* analysis prepared for the World Economic Forum summit in Davos, Switzerland, identified 'severe income disparity' as the greatest threat facing the world economy; this assessment was based on a survey of over 1,000 experts from industry, government, academia and civil society (Rashbrooke, 2013, pg., xi)

Rashbrooke describes how New Zealand was historically one of the developed world's more equal societies but there was an increase in income inequality between the mid-1980s and the mid-1990s (Rashbrooke, 2013 pg., 23). With respect to pre-tax income figures from Inland Revenue with respect to 2002-2011, half of the total population:

earns less than \$24,000. Among them are beneficiaries: those on the unemployment benefit receive \$11,900 a year before tax, someone on the domestic purposes benefit (DPB) gets \$17,300, and pensioners receive \$20,800 each... 70 per cent of New Zealanders earn under \$43,000. A full-time minimum-wage salary, for example, equates to \$28,600 a year (Rashbrooke, pg., 20).

Further up the income ladder 90 per cent of New Zealanders:

earn less than \$72,000. Senior firefighters earn no more than \$57,000 a year, while the basic maximum income for teachers is \$73,000 (Rashbrooke, pg., 20).

And those amongst the top 5 per cent of our population:

earn a minimum of \$93,000 each. The top 2 per cent earn over \$131,000, including MPs, on a minimum of \$141,800 as well as chief financial officers and principal accountants. To be in New Zealand's top 1 per cent you would have to earn over \$170,000, while the top 0.4 per cent (some 13,000 people) earn over \$250,000 each. In this latter group are the most senior managers in government departments and public sector bodies (where more than 250 staff are on over \$250,000 each), and the highest-paid staff in large companies, where the average salary for chief executives is \$1.5 million. (Rashbrooke, 2013, pg., 20).

The statistics we have are also likely to be biased and the actual situation is likely to be one of even greater inequality. For example 'family trusts are used to avoid an estimated \$300 million in tax each year (Rashbrooke, 2003, pg., 23-24)'. And there is less data available in New Zealand because the absence of a capital gains tax means that it does not record capital gains. The picture is one in which:

around 800,000 New Zealanders [are] below the poverty line... And against these figures can be set the 29,000 people who hold 16 per cent of New Zealand's wealth or the 13,000 New Zealanders who have incomes over \$250,000 (Rashbrooke, 2013, pg., 6).

Let us now turn from inequality of income and inequality of wealth, back to the inequality of mortality, or health. The Commission on Social Determinants of Health (2008, preamble) told us, back in 2008 that:

The poorest of the poor have high levels of illness and premature mortality. But poor health is not confined to those worst off. In countries at all levels of income, health and illness follow a social gradient: the lower the socioeconomic position, the worse the health.

This well-known relationship between (on average) more wealth and better health (or less wealth and less health) that was introduced last chapter is standardly known as the 'socio-economic gradient of health'. One might say generations of research or further work needs to be done because we don't know whether poor health causes poor wealth, or whether poor wealth causes poor health (see, for example, Bierre and Howden-Chapman, 2017), but it seems fairly intuitively obvious that they would be mutually reinforcing. Rashbrooke, (2013, pg., 7) relates how in New Zealand 'Over a quarter of poor households report going without shoes, heating all rooms of their house, or giving birthday presents to their family. In half of poor households food runs out because there isn't enough money... Low-decile schools report many children coming to school without being properly fed, or without adequate clothes - again, because their parents, even when working, don't earn enough to pay for these basic necessities' (Rashbrooke, 2013, pg.,7).

This level of poverty will impact negatively on people's health and wellbeing, their self esteem, and sense of competence in this world. It will negatively impact on their mood and on the ways they are able to contribute to the development of their neighbourhood. In an attempt to quantify basic necessities we hear how a typical two-parent family, with two children, living on one minimum wage income would do, in 2012:

[A] full-time minimum wage salary of \$540 a week becomes \$460 after tax. Working for Families and the accommodation supplement might increase that to \$790. An average house in eastern Porirua, one of New Zealand's cheapest suburbs, costs \$255 to rent, leaving around \$540... Feeding a two-child family well - by meeting nutritional guidelines in the cheapest way possible - costs around \$260, even if families buy raw ingredients (rather than packaged meals), and the cheapest meat, fruit and vegetables. That leaves around \$280 per week for everything else. Running a car (a necessity for many people to access work) typically costs \$85. Power costs can often be \$50. So once bare survival is taken care of, just \$145 a week may be left for everything else: \$5 a day per person to cover clothing, a phone, replacing or repairing appliances, healthcare costs, and so on (Rashbrooke, 2013, pg., 6-7).

This is a working family in New Zealand and yet the amount doesn't seem enough to meet a standard of living. Income, rather than lack of budgeting, is the issue, here.

Now let us turn from the issue of inequality of income and distribution of wealth to the issue of inequality of access to homes that enable people to be healthy. As early as 1863 observers were complaining about slum landlordism in New Zealand, and the inability and unwillingness of governments to intervene to improve housing conditions (Bierre and Cunningham, 2013, pg., 105). These authors describe how the first Labour Government set up public-private partnerships in 1935 as a state intervention to stimulate the economy by constructing thousands of state houses. These state houses were built wherever workers and their families were needed to provide social services as teachers, doctors, and nurses etc. Not only did this provide high quality, affordable houses for those who needed them, it also set the standard for other housing: the building specifications used for state housing became the norm for the whole industry until at least the 1960s and paved the way for other, substandard housing to be demolished. They relate how in the 1960s state houses formed about 10 per cent of the national housing stock.

In 1988 The World Health Organisation Regional Office for Europe published healthy housing guidelines:

The purpose of these guidelines is to remind Member States, Ministries of Health and Architecture, policy-makers, environmental health officers, sanitarians, planners, architects, and others concerned of housing hygiene in relation to "traditional" and "new" slum housing. The guidelines are aimed at encouraging administrations to formulate a sound housing policy that helps to solve *basic* health-related housing problems and to meet WHO's objective of healthful housing for all by the year 2000. The guidelines will also contribute to the United Nations Harmonization Programme (Economic and Social Council - Economic Commission for Europe) on housing (World Health Organisation, 1988, pg., vii).

The guidelines go on to describe a large number of considerations that go into healthy housing including: orientation of buildings, open space and density requirements. Recuperation from sickness or ill health, privacy, aesthetic satisfaction, work activities carried out from home, rainfall and penetrating dampness, excessive noise and vibration, cockroaches, human intrusion, choice of building components, asbestos, water supply, toilet facilities, storing preparing and cooking food, water vapor and condensation dampness, tobacco smoke, ventilation, vehicular traffic, poisoning from plants and fungi, special housing requirements, children, the elderly, the disabled, persons with movement difficulties, persons with hearing and / or speech difficulties, educational measures. I am belabouring this by enumrating so many of the factors because it is rather surprisingly common, still, for government officials, and others, to attempt to convey that substandard housing is habitable. Extensive reports have been done already. With respect to the purpose of the World Health Organisation guidelines:

The guidelines are aimed particularly at developing middle-income countries in Europe, defined by the World Bank as Belgium, Bulgaria, Czechoslovakia, Greece, Ireland, Italy, Poland, Portugal, Romania, Spain, Turkey and Yugoslavia. However, the principles of healthy housing have universal applicability as most countries of the developed world have areas of slum or otherwise unsanitary housing. It is hoped that the guidelines will be extensively used as a reference to basic health requirements for new housing and human settlements and as a guide for assessing the hygenic quality of existing housing. It also could be used in interprofessional and community education and training programmes (World Health Organisation, 1988, pg., vii).

It was during this time that instead of the New Zealand Government investing in improving housing quality (e.g., by improving building regulations, installing central heating and ventilation systems) the state houses were sold off to private investors such that:

In 2006 this stock now forms less than 5 per cent of the overall housing stock and is among the smallest in the OECD. This is considerably less than 20 per cent in the UK or levels in Switzerland, Germany, Austria, and Sweden where the majority of renting population rent from social, or not for profit landlords. (Howden-Chapman, Bierre, and Cunningham, 2013, pg., 165).

Howden-Chapman, Bierre, and Cunningham describe how, now in private hands, house prices rose faster than inflation, home ownership fell despite most people in rental properties preferring to own their own home for security and as a means of improving the quality of their housing. Building legislation did not change much and even very minimal regulations of existing dwellings have been poorly enforced. The authors relate how 'Older rental accommodation is in the poorest condition; over 50 per cent of renters reported one or more major problems with their dwelling compared to 28 per cent of owner occupiers. Over two-thirds of children are living in poverty... Perhaps unsurprisingly, New Zealand is seen internationally as having notably poor housing standards - a genuine outlier in the developed world (Howden-Chapman, Bierre, and Cunningham, 2013, pg., 113).

It was not the case that landlords invested in improving the quality of their housing. In New Zealand poor quality housing and overcrowding has been described as leading to:

[A]ppalling rates of what are normally considered Third World diseases, especially among children: meningococcal disease, rheumatic fever, cellulitis, bronchiectasis and childhood pneumonia... While other developed nations have reduced or virtually eliminated these diseases... in the two decades after 1989, the New Zealand rate of admissions to public hospitals for infectious diseases increased strikingly by 51 per cent - equivalent to 17,000 additional hospitalisations. The risk of admissions for infectious diseases was more common among people with Māori and Pacific ethnicities and those living in areas of relatively high poverty (Howden-Chapman, Bierre, and Cunningham, 2013, pg., 114).

Rashbrook describes how:

[D]eep poverty has long been a crisis for New Zealand, one confronted by many committed researchers, campaigners and organisations. [New Zealand has] one of the world's worst records of child health and well-being with alarming rates of preventable diseases amongst children. Children in New Zealand are more likely to be poor, and less likely to feel safe and well, than children in most other developed countries. One major report on children's welfare ranked New Zealand twenty-eighth out of thirty developed countries, better only than Mexico and Turkey. In particular, our rates of preventable diseases, especially among children and the elderly, have been described as a "national embarrassment" (Rashbrooke, 2013, pg., 2).

While there have recently been some alterations to building legislation around ceiling and under-floor insulation, requirements on wall insulation are lacking and houses are not required to have double glazed (and pressure sealed) windows, thus still allowing for heat to escape from the house via the weakest link. We are currently positioned such that getting landlords to install a single heat pump for a property (as a chattel source of heating for the property rather than as a source of heat that must be purchased and maintained by tenants) is seen as an unrealistic ideal. It is known to many, however, that installing a single heat pump is not able to heat a house to temperature. This is why central heating systems have a central source of heat - a water tower or a heat pump - linked to a series of radiators that are installed in every room.

While one may point out that many landlords do not choose to heat their bed-

rooms or install central heading in their primary residence, there is a difference between choosing to live like this and having no option but to live like this. There is also a difference between having a home like this when one spends much of every day working in a climate controlled office compared to renting home-makers who may spend around 90 per cent of their time in their home.

### 2.2 Future inequality

Instead of considering inequality at a snapshot in time, we can get a sense of the overall trajectory by considering how it has progressed through time. The best prediction we can make for the future is based on knowledge of the past. We will now turn to the issue of the trajectory of inequality between countries before turning to the issue of the trajectory of inequality within New Zealand more in particular.

#### 2.2.1 Between countries

The issue of inequalities between countries is complicated to assess. Generally, the idea seems to be that developing nations are doing just that and their development involves their more closely approximating the status or standing of other nations, perhaps as their military comes to be feared, or as their technology allows them to develop desirable consumer items. Sometimes the focus is on the widespread availability of consumer items that were once available only to a select few such as cars, air travel, personal computers, or smartphones. Whether the latter constitute progress in equality when the status is more that of the end of the supply chain (for example, the cars that are near the end of their useful life, or other consumer products who didn't manage to be sold in any of the countries they passed through on their way here like surplus stock on northern hemisphere fashion trends) is unclear, however. New Zealand has supply chain problems that result from the 'realities of a small population and long and skinny country - far from global manufacturing' (Grant Thornton New Zealand Ltd., pg., 2). The seasonal variation also places us at least 6 months behind seasonal surplus in off-shore production.

There is evidence that New Zealand is falling behind the developed world.

The last thirty years have seen a market shift in power and rewards away from ordinary workers to owners and managers... despite their protestations to the contrary, companies, company owners and their managers face few constraints on their ability to perform in one of the easiest economies in the world in which to do business. Contrary to the arguments presented in the 1980s and 1990s... this shift in power has not driven strong growth and improved productivity. Once, New Zealand enjoyed one of the world's best standards of living, but in recent decades we have fallen further and further behind other developed countries, and we are now twenty-first out of the thirty-four OECD countries when it comes to income per person. Our productivity performance is also equally poor (Haworth, 2013, pg., 198-199).

Apparently, this is part of the ideology that was embraced by our nation's leaders. Haworth's analysis is that:

The reason we are doing so badly is that our policy-makers, and most of our investors, have chosen what is internationally known as the 'low road' to growth. The dominant business model has focused largely on controlling and cutting costs, on the basis that this would, eventually, lead to greater economic growth. Levels of government intervention and regulation have been kept low, and, above all, most employers have preferred to use a 'low-wage' model in tune with the 'low-road' approach to growth, a choice consciously supported by employment legislation in the 1990s and again since 2008 (Haworth, 2013, pg., 199-200).

The result of this is thought to be that 'large numbers of low-paid, low-skilled workers are, for the most part, involved in the production and export of basic, low-value commodities... or in a service sector marked by low skills, low levels of training and low pay. In addition, the low level of input that most staff experience in their company's decision making means that their ideas, talent and innovation often lie unrecognised and unused' (Haworth, 2013, pg., 199-200). The view here is that our gross domestic product is lower than it would be if we paid, housed, educated, employed and basically allowed more of our people to live more in keeping with their potential by provisioning them with basic resources.

Gould, writing in 2010 (about why New Zealand should be reluctant to sign up for the TPPA since we aren't being offered much since we have little to bring to the table except for increased dairy exports which would undermine local producers of other nations) states, along similar lines:

The classic instance of a country seeking to step up to the economic mark is that of a developing economy. If we look to Japan and Korea, and now China and India, which have all been developing economies over relatively recent times, we can see that they all chose to protect their economies behind tariff walls and other obstacles to free trade... The Japanese economic miracle of the 1960s and 1970s was built on that basis; the Chinese version is similarly based today. Although New Zealand does not see itself as a developing country, it should do. Many of the countries that New Zealand has traditionally regarded as developing are now outperforming it by comfortable and growing margins. It would be helpful for New Zealand to identify itself correctly, not as a developed country and only perhaps as a developing one, and to frame its economic policies accordingly. (Gould, 2010, pg., 38).

This is a different picture or paradigm from the story New Zealanders are typically told about how we are one of the most equal countries in the world.

#### 2.2.2 Within New Zealand

Rashbrooke, (2013 pg., xi) more explicitly states that the trajectory of inequality in New Zealand is such that the gap between high and low incomes has widened faster in recent decades in New Zealand than it has in most other developed nations.

New Zealand now has the widest income gaps since detailed records began in the early 1980s. From the mid-1980s to the mid-2000s, the gap between the rich and the rest has widened faster in New Zealand than in any other developed country (Rashbrooke, 2013, pg., 1).

The sale of state owned state house assets made it harder for people who value home ownership to own their own homes. The:

[S]hift from state to market provision created a growing gap between those who owned houses and those who did not. The increasing consumer price inflation of the 1970s and 1980s, combined with rising real mortgage interest rates of the 1980s onwards, made it more difficult for those who were renting to buy houses, adding to the value of home ownership. (Howden-Chapman, Bierre, and Cunningham, 2013, pg., 110) More recent statements on the situation in New Zealand include increasing mainstream media attention. In an article entitled 'Outrageous fortune: what skyrocketing executive pay means for inequality' (2017) Macfie reports in *The New Zealand Listener* a situation of rising inequality:

The salary paid to the boss of the Ministry of Education, for instance, increased 56% between 2004/05 and 2015/16, from a band of \$410,000-419,999 to \$640,000-649,999. By comparison, the top base pay rate for teachers has increased 25% from \$59,537 to \$74,460 over the same period... At the Ministry of Health, the chief executive's pay has gone up 28% in the same period, from a band of \$390,000-399,999 to \$500,000-509,999.

Akoorie and Wiggins report in *The New Zealand Herald* that 'DHB bosses and board members cost taxpayers \$65 million a year':

Taxpayers forked out almost \$66 million last year to pay 444 people to run the country's 20 district health boards. The bulk of that money, up to \$60m, pays for 231 chief executives and their senior executives while 209 board members and four commissioners are paid almost \$6m for just 30 days of work each year... The DHB was so far behind its cardiac surgery schedule that one patient's operation was cancelled six times. Another patient whose surgery was cancelled four times died. (Akoorie and Wiggins, 2018).

On the other hand, nurses strike over the 3 per cent pay offers made to them by members of the district health boards and:

Jaine Ikurere, the 63-year-old woman who cleans the Prime Minister's office, is still on just \$14.60 an hour after 19 years of cleaning at Parliament. (Rashbrooke, 2013, pg., 9). While there has been an increase in minimum wage since then, it is worth comparing that increase in minimum wage with the increase in chief executive wages in the corresponding time period. It seems that the trend has been that inequality is increasing, and projections are that it will continue to do so, into the future.

## 2.3 From inequality to inequity

If we now remember Nthabiseng, Pieter, and Sven, many of us have the intuition that it is grossly unfair that their individual life chances should be so radically different based on factors such as their nationality, racial group, assigned sex at birth, or being born into a low or high income family. Life is not a game where one gets to choose one's initial personal statistics. One does not get to choose where one will be born, what race one will be, what socio-economic class, or, indeed, whether one will even be born, at all.

With respect to inequalities in income, people do have a tendency to lose the intuition that inequalities are (necessarily) unjust, however. For example, if we focus on inequality of pre-taxation income, then the counter is that some people deserve to earn more than others because they either a) work harder than others so deserve more remuneration and / or b) have the ability to do highly skilled things that most people cannot, so deserve more remuneration. One might also think that some people deserve to earn more than others because they are the ability to do highly of their contributed more to others either with respect to the quantity or quality of their contribution.

In response to this, we can agree that people who a) choose to take on extra work (when others decline to take on extra work) should be remunerated for it, and that b) people who have the ability to do things that most people cannot (even though other people similarly had the opportunity to work to develop their talents and skills) should be remunerated more for it. We can agree, also, that it certainly seems fair for people who contribute more in either quality or quantity of contribution to be remunerated more for their efforts. The issue is one of inequality when others didn't have equality of opportunity to take on the work (e.g., because their application is not processed and / or because the work is not offered to them, perhaps due to discrimination against them), or to develop their talents and skills (because they do not have access to quality schooling or structured after-school activities) such that they could competently take on the work.

As Ian Taylor (a chief executive) puts it:

[W]hen large amounts are being paid to some, and the family down the road is not able to feed their two or three kids... that inequality just seems wrong, and it doesn't seem to make sense. It's pretty basic (Taylor, 2013, pg., 18).

People have claimed that we need to pay our top (particularly government) people well or they will take off to earn more in the private sector, or to earn more overseas (see, for example, Skapinker, 2016). Despite this, the State Services Commission reports:

The remuneration received by the highest paid Crown entity CEs is too high... There are important guiding principles that underpin the role and function of the State sector which are relevant to chief executive remuneration. One of those principles is the spirit of service, a duty to act responsibly in the public interest and to be a good trustee of public resources, including remuneration. The second principle is around public trust, an expectation that the State sector is accountable, transparent, fair and reasonable... CEs need to be paid fairly, at a level sufficient to attract and retain the best people, but we also need to be fair to the taxpayers who pay the bill. (State Services Commission, 2017 pg., 1)

Taylor maintains that high pay is not even a sensible motivator:

If you have got people running companies whose focus is on the size of their pay packet, then I don't think they should be running them... One can refuse to take pay increases. Putting a lid on salary increases is an obvious first place to start (Taylor, 2013, pg., 18).

If people only want to take on high level positions in our government, universities, and hospitals because of the remuneration - or, what the job can do for them - then they probably are not the best people for those jobs. It is implausible to think that, in the majority of cases, the people filling those positions are taking personal financial hits to fill those positions. It is far more plausible to think that, in the majority of cases, these individuals are simply pursuing the best financial package they can, for themselves, which (given current pay structures) has them placed in the positions they are in. We need to remember that these people are the people who decide how much remuneration is appropriate for themselves and how much remuneration is appropriate for other in their employ and is a reflection of how much they value their own contribution compared to the contribution made by others in their organisation. In Chapter 5, we will consider this life strategy of taking as much as you can if you think you can get away with it. This stands in sharp relief against a background of other employees who are contributers who are not provided with the resources they need in order for their basic needs to be met.

If we try and find some sort of common-sense understanding of 'equity', then we will find something along the lines of the following (see, for example, Merriam-Webster.com, 2019):

- 1. Fairness or justice in dealings between persons
- 2. A system of law dealing with (for example) succession, trusts, or inheritance of asset.
- The value of an owner or shareholders interest in a property in excess of claims or liens against it.

The first notion of equity as fairness or justice is a topic within moral and political philosophy, and in philosophy, politics, and economics. Equity is linked to notions like justice or fairness and the issue of 'why be equitable?' is sometimes interpreted as being a question along the lines of 'why be moral?'. This is to say that if one doesn't understand that equity should be a consideration, then one doesn't understand what it is to be moral. It is often described as having something to do with the way resources are distributed on grounds of justice or fairness. For example, the rule behind the phrase 'you cut and I choose' is an equitable or fair rule because following the rule is likely to lead to an equitable or fair distribution. 'I cut and I choose' describes a less fair rule, however, as an equitable or fair distribution would only result from an individual's conscience or sense of fairness or morality. This is something that appears to be lacking in many people as I will make a case for at greater length in Chapter 5. If people think they can get away with taking more than their fair share, they think they would be foolish for passing up the opportunity. I will return to this theme at length in Chapter 5.

Equity also has a tradition in law, where equity courts – chanceries – were set up to deal with making judgements on cases where the laws were commonly regarded as insufficient for judges to make rulings in the interests of equity or fairness. For example, the traditional laws didn't allow judges to make rulings that seemed fair about the distribution of inherited asset or property.

Equity also has a tradition in financial accounting where the basic financial equation states that equity is the remainder of the difference between assets and leins against it. Owner's or shareholder's equity has to do with the assets of the company and how it will be distributed in liquidation. While the legal and accounting notions are typically thought to be distinct from the notion that is relevant to health and healthcare, they might turn out to be of use yet with respect to our understanding succession in Medicine and the growth of various health-related businesses in ways that are (in the first sense) equitable between persons.

It would be a fairly standard view to think that it is the first sense that is relevant, here, and move on from the other two ideas as not being relevant. I think that these three notions of equity are important, however. In Chapter 4, we will see that it is worth asking who the primary beneficiary of a proposed equity intervention is. More particularly, it is worth asking whether an intervention done in the name of equity is more likely to empower the equity group, or whether the intervention is more likely to entrench inequality. In order to assess this we need to be very clear on who the equity group - or primary beneficiary is supposed to be. In Chapter 5, we will return to the idea of legacy, inheritance, or succession. When we are considering equity, we need to bear in mind that different players might be using the terms in different ways, or perhaps even being ironic, intentionally ambiguous, or even intentionally misleading.

# 2.4 From inequity to equity group targets in New Zealand

In the previous section we saw that 'equity' in accounting focuses on an overall amount or size of the pie and not necessarily on fairness of distribution. When it comes to identification of equity groups, however, the primary 'equity' groups are regarded to be those who have been identified as the victim or target of inequity.

All the way back in 2008 Signal, Martin, Cram, and Robson produced *The Health Equity Assessment Tool: A User's Guide* for the Ministry of Health. They identify what they regard to be 'types' of inequality: ethnic, gender, socioeconomic, geographical and disability (Signal, Martin, Cram, and Robson, pg., 10). I will consider each of these groups in more detail in Chapter 4. They also ask us to identify (among other factors) what inequalities exist, who is most advantaged and how, and then the issue of how the inequality occurs, or what the causal chain is that leads to the inequality. For example:

HEAT seeks to identify who is advantaged in relation to the health issue being considered and in what ways this advantage plays out. The focus is deliberately on who is advantaged or privileged, rather than on the 'victims' of inequity. A focus on 'victims' risks locating the origin of inequity in the supposed deficits and failings of individuals rather than in the social institutions and practices that have caused the inequity. A focus on who is advantaged, on the other hand, examines the unearned privilege that some groups have acquired as a result of inequalities (Signal, Martin, Cram, and Robson, pg., 10).

They ask us to consider:

How did the inequalities occur? What are the mechanisms by which the inequalities were created, maintained or increased? This question focuses on how inequalities have occurred and therefore what needs to change for them to be addressed. (Signal, Martin, Cram, and Robson, 2008, pg., 10).

They also consider a hypothetical causal chain: belonging to a marginalised group > discrimination > access to education > educational attainment >

employment status > income > access to health care. (Signal, Martin, Cram, and Robson, 2008, pg., 11).

This idea of focusing on the primary beneficiaries is a very interesting one. It is interesting that 'equity' groups are groups who have been identified as victims of the negative end of the inequality. I think it is important that we be clear on the valence. I will have much to say about who the primary beneficiaries are throughout this thesis. It is a very interesting idea to focus on who is the recipient of unearned privilege who stands to (continue to) profit if we fail to intervene to rectify the injustice.

With respect to being clear on valence, we can reword their hypothetical causal chain to: belonging to a marginalised group > discrimination > lack of access to education > lower levels of educational attainment > lower employment status > lower income > less access to health care > lower levels of health. Let us consider: Who profits - or, who is the primary beneficiary of this situation?

Kelsey has written extensively on how various iterations of the New Zealand Government has failed to legislate to protect the people (e.g., Kelsey, 2010; 2015). More recently, she has written about the FIRE economy - how our economy has come to be based on finance, insurance, and real estate - which has resulted in a property bubble where many people do not own their own homes while other people accumulate wealth by property investment.

When the state owned houses were sold off to private investors, to be rented at market rates (thus making housing more unaffordable for people) who purchased those houses? The Register of Pecuniary and Other Specified Interests of Members of Parliament (2018) states that 32 MPs are declared residential landlords owning 59 residential properties between them. We are not told whether or not it is state housing that they are investing in, particularly, but they have an interest in rental properties as investments. We are not told how many high level government employees in health and universities have similarly chosen to distribute money to themselves rather than their employees so they may own rental properties instead of providing enough to their employees so their employees may become owners of their own homes.

When the government refuses to tax capital gains and refuses to bring our building (housing) legislation into line with building (housing) legislation in other developed nations we should ask who profits? so that we can better understand the effects of the decisions that are made around where the money goes. While it is important to appreciate that many people require temporary accommodation for temporary portions of their lives and that there is some market demand for high quality temporary accommodation that is not my focus, here. In 'Changing the Rental Rules' Hargreaves (2017) describes how landlords don't want to install heat pumps in properties with long term tenants that makes heating more affordable for those tenants because their tenants can't afford to pay more rent than they are already paying. There are few building regulations preventing slum landlordism in New Zealand and what little regulation there has been is often poorly inforced.

One should be concerned about who is investing in private hospitals / aged care facilities because these people would stand to profit from public hospital and health system infrastructure not being maintained. These people may have tied their future wealth to the demise of the public health system which enables them to profit from private contracting where the public system was unable to provide essential services under their care. It is important that we know where the chief executives and members of the board choose to invest their money in the market.

The point of these questions and this line is not to accuse people (rightly or wrongly) of doing the above. The above isn't dependent on the intentionality of the agents it is only making claims about who as a matter of fact stands to profit from various policies. If it turns out that people are investing their money so as to profit at the expense of other people's lack of access to basic resources such as adequate shelter, then the extent of the inequality would strike many as unjust. This is quite aside from the issue of how complex the jobs are of those who are paid the highest and quite aside from just how hard they work to secure a good return on their investments.

One possible response to the idea that we should bring our legislation into line with the legislation of developed nations is the response that there is no alternative (see Kelsey, 2015) things are too messy, too hard, and that we don't want to interfere with the free market. The market is not particularly free for many New Zealanders, however. Many New Zealanders can only buy inferior goods (in the economic sense of goods that are only purchased because people lack funds to purchase the goods they truly desire) because many cannot even afford to pay market rent to live in other people's rental houses. Work and Income quotes are typically required to be for cheapest alternative, and when you add in end of supply chain, the result is that New Zealand becomes a repository for goods the rest of the world does not want. Before, we considered Nthabiseng, Pieter, and Sven. Let us now turn to what Karlo Mila has to say about what she has experienced of life in New Zealand:

People with limited resources are forced to 'choose' less than optimum options by default, through lack of knowledge, resources, time, local facilities, or power. It is what happens when you can't afford a car and all the shops within a walking radius sell cheap liquor, pokies, five different types of deep fried food, and no fruit and vegetables. It is what happens when the schools around you serve up an accent to your five year old so that he sounds like Jake the Muss from *Once Were Warriors* and learns not to make eye contact with adults, rather than numeracy and literacy. It is what happens when he comes home and asks you why he has a black face. It is what happens when you don't feel safe walking down your streets unless you have gang protection, and four out of five of the older boys, brothers and cousins you admire, are already finding that this is the only sphere in which they shine, where they are respected, accepted and recognised as powerful and productive.

It is what happens when the real banks won't lend you money and the loan sharks are wooing you, cheap bait for bad debt. And when no one you know actually owns their own house, or knows what a PhD is, or has plans for their future. And most of your time is spent making sure that you can get food on the table and that the power won't get cut off; and you know there is no money for extras like Saturday sport for your talented kids because you can't afford boots or fees, no swimming lessons, and no class photos, and no Lucky Book club books; and your children already know that there are things in life that are beyond their reach, that are not for them, and they are already feeling it in ways that make them burn inside. This is not about options: This is about making the best of bad situations, and survival... How do these children present themselves creditably to our society without the shame and stigma of identifiable poverty, further compounded by ethnically marked bodies? How do they ward off the pain of shame and humiliation? How do they grow up feeling good about themselves and society, and hopeful for their futures? (Mila, 2013, pg., 87-88).

I provided the above long quote because it eloquently describes a lived experience for New Zealander that puts a humanistic focus on the issues we have traversed in this chapter where an inclination has instead been to remove the human face and lived experience in order to focus on graphs, budget sheets, and statistics that are far removed from the lived experience of persons.

In New Zealand in 2008 Howden-Chapman and Bierre stated that we weren't sure whether sub-standard housing causes ill-health, or whether ill-health causes people to live in substandard housing. Similarly, we weren't sure whether poor people had more ill-health because they were poor, or whether it was people who suffered from ill-health who were poor (Howden-Chapman and Bierre, 2008, pg., 161). They state:

[C]hildren born into low-income households will have more illness and shorter lives, on average than those born into high income households. But why is this so? Do lower incomes buy less healthy housing, and do these less healthy housing conditions partially explain the difference in life chances? And, if differences in housing quality are part of the answer, is it possible to identify researchbased housing interventions that can reduce these health inequalities?

The issue I have with their putting the issue in this way is that it seems to suggest that future research should be in the form of an observational study where a certain number of people will get an intervention (e.g., a dehumidifier or a heater) while the control population will be required to live without these interventions for the length of the study in order for us to observe what will happen to them. My issue is that we know that the effects are likely to be harmful. This is not an acceptable response to the situation. It is not the best use of government funds to fund yet another observational study that involves withholding basic resources to New Zealanders apparently on the grounds that there isn't the money to instal basic amenities in their rental homes.

The 2008 report did not seem to be asking who profits from the status quo, or from the lack of government intervention, as I have asked, above. The report had more in mind an analysis of the relatively small and short term interventions that do not overly affect the status quo. For example, offering a sum of money to run a smokefree campaign might be thought to primarily benefit Māori (who have higher rates of smoking). On the other hand, running a smokefree campaign, instead of legislating against the tobacco industry, might well be more likely to benefit big tobacco than Māori. We are told the HEAT strategy can not only be used to justify future government interventions, but also it can be used in hindsight to justify what has already been done.

In Howden-Chapman and Bierre (2008) the authors describe how it is hard to change the narrative from one where we claim not to know what interventions may be effective and so we will just have to sit back and wait in a manner that mostly continues to benefit those who are benefiting the most already, e.g., by doing an inter-generation study. We don't know about the housing situation: Let us sit back and watch several generations of (more likely than not) Pacific Islanders develop rheumatic fever > not be given antibiotics (they wouldn't take them properly anyway) > development of systemic immune response attacking heart values > lack of value replacement operations > strain on heart > lack of heart transplant operations > heart failure. While we might be campaigning for greater awareness of such things now (and equitable access to antibiotics), we have still not fixed the overcrowded housing situation or improved it such that adequate heating allows members of a household to disperse through the space rather than congregating in a single room because it is cold. Let us measure the mold and development of asthma and let future research determine the mechanism (Shorter, Crane, Pierse, Barned, Kang, Wickens, Duowes, Stanley, Taubel, Hyvarinen, Howden-Chapman, 2017).

The Commission on the Social Determinants of Health states that the Socioeconomic gradient of health

does not have to be that way and it is not right that it should be like this. Where systematic differences in health are judged to be avoidable by reasonable action they are, quite simply, unfair. It is this that we label health inequity. Putting right these inequalities - the huge and remediable differences in health between and within countries - is a matter of social justice. Reducing health inequities is, for the Commission on Social Determinants of Health (hereafter, the Commission), an ethical imperative. Social injustice is killing people on a grand scale (Commission on the Social Determinants of Health, 2008, preamble).

More recently there has been a growing awareness of these issues around unaffordable, unhealthy housing. If we attempt to look at who profits (and how much they have been profiting) from the status quo then we may be better positioned to understand the resistance. The resistance has been a source of confusion in the literature that has been created by people whose livelihoods are dependent on their receiving government payments or handouts in order to obscure relationships that were obvious all the way back in the 1800s and in the 1980s' World Health Recommendations on Healthy Homes. More recently sociologists, particularly, and also journalists (such as Rashbrooke and a variety of authors publishing in the New Zealand Herald and Otago Daily Times) have succeeded in articulating (and facilitating others' articulation of) the issues so that this chapter doesn't have to be my whole thesis. Bierre and Howden-Chapman also describe in an abstract how:

while narratives used by advocates for policy change were effective in raising the issue, they were ineffective in overcoming a counternarrative of excessive regulation by the government and concerns of possible rent rises. This opposition to regulation of the private sector by a right-leaning government needs to be more effectively countered by more powerful intersecting narratives, if evidence on the relationship between housing, health and safety is to become the basis for effectively implemented government policy. The idea, here, is that people have expressed concerns about unhealthy housing and the standard response to that has been that bringing our regulation into line with developed nations would be 'excessive'. There is also the idea that if landlords were required to provide quality heating infrastructure as chattels then landlords would as a matter of fact pass the costs on to tenants which would make housing even more unaffordable.

In response to this, we have seen already how inequality is increasing in New Zealand at a faster rate than it is in much of the world. This is because the New Zealand Government has failed to legislate to protect its people comparably to the governments of other nations. While it is the case that there are people who have borrowed extensively to become landlords because they were promised returns on their investment that required them to maintain slums, we need to appreciate that other landlords have been making exorbitant profits at their tenants' expense.

The counter-narrative of regulation being 'excessive' is a counter-narrative that has not been and is not responsive to reason or empathic identification. The counter-narrative is being generated by the primary beneficiaries of the status quo and they seem to regard their job as one of ensuring that there is no legislation that puts the people of New Zealand ahead of the interests of some elite minority both in this country, and overseas. While the call has been to appeal to people more widely - an alternative is to to stop attempting to dialogue with those who are disingenuous when it comes to their unwillingness to respond reasonably and humanely to causal chains that are known well enough for them and their cronies to have decided to invest in profiteering from.

New Zealand has been described as being the best place in the world in which to do business, and particularly in which to start or set up a business in both 2016 and 2017 (The World Bank, 2018). The foundation of *Doing Business* is the notion that economic activity benefits from clear and coherent rules: rules that set out and clarify property rights and facilitate the resolution of disputes. And rules that enhance the predictability of economic interactions and provide contractual partners with essential protections against arbitrariness and abuse. Such rules are much more effective in shaping the incentives of economic agents in ways that promote growth and development where they are reasonably efficient in design, are transparent and accessible to those for whom they are intended and can be implemented at reasonable cost. The quality of the rules also has a crucial bearing on how societies distribute the benefits and finance the costs of development strategies and policies (The World Bank, 2018, pg., 12).

We are told:

The design of the *Doing Business* indicators has been informed by theoretical insights gleaned from extensive research and the literature on the role of institutions in enabling economic development... The choice of the 11 sets of *Doing Business* indicators has also been guided by economic research and firm-level data, specifically data from the World Bank Enterprise Surveys. These surveys provide data highlighting the main obstacles to business activity as reported by entrepreneurs in more than 131,000 companies in 139 economies. Access to finance and access to electricity, for example, are among the factors identified by the surveys as important to businesses... Some *Doing Business* indicators give a higher score for more regulation and better-functioning institutions (such as courts or credit bureaus)... Thus, the economies that rank highest on the ease of doing business are not those where there is no regulation - but those where governments have managed to create rules that facilitate interactions in the marketplace without needlessly hindering the development of the private sector... (The World Bank, 2018, pg., 12)

It isn't just that our government has refused to legislate for the people, it is that our government has also legislated in the interests of business - against the interests of the people (see Kelsey, 2015). As we have seen, it is also the case that members of the government have chosen to personally invest in rental properties and thus have a vested interested in protecting their investment.

With respect to the issue of who the primary beneficiaries are, or who stands to benefit the most there are many examples of experiments (or observational studies) that have been targeted towards people of certain groups. For example, in Nazi concentration camps many experiments and observational studies were targeted towards people with disabilities, Jews, and Gypsies for the supposed benefit of the Aryan peoples. The Tuskagee Study of Untreated Syphilis carried out by the US Public Health Service, in collaboration with Tuskagee University (an historically Black college) enrolled 622 impoverished African Americans in order to observe the progression of untreated Syphilis in 431 of them - without informing them of their condition, or of the fact that they would never be treated despite growing evidence of the utility of penicillin (Brawley, 1998). In New Zealand we may wonder whether Māori and Pacific peoples have similarly been targeted for observational studies of untreated infections resulting from living in housing conditions known to be unhealthy. For how many generations are we going to sit by and watch the obvious unfold? We know it is obvious because of how people have chosen to invest (tie their wealth) to this likely future. It is disingenous to suggest that we don't have enough information and recommend that we sit back and watch / fund another observational study:

Although we are gaining an increasingly nuanced picture of health

inequalities and engaging in more sophisticated debates that extend our understanding of the causes, there has until quite recently been less concentration on the practice of intervening to reduce these inequalities... Part of the challenge here is that there is very little empirical evidence from activities which have an explicit focus on reducing health inequalities either in terms of effectiveness or in terms of the theories of intervention. Where there is, the quantitative evidence of effectiveness is often equivocal, with calls for greater concentration within the literature on understand more about the connection between individuals and societal structures, as well as a greater understanding of social complexity generally (Matheson and Dew, 2008, pg., 14-15).

We know intervention has the power to change things:

the recent Healthy Housing Programme, formerly operated by Housing New Zealand, found that when state houses were extensively refurbished and joint efforts were made by housing officers and visiting nurses to improve families' living conditions and healthcare, hospital admissions for children fell by two-thirds (Howden-Chapman, Bierre, and Cunningham, 2013, pg., 117)

We hear that the trajectory of inequality is such that 'the patterns of health inequalities are not fixed and immutable, suggesting that with will and determination, alongside better understanding of both the underlying mechanisms that cause health inequality and the interventions that can redress them, a more equitable society is achievable (Matheson and Dew, 2008 pg., 12).

In the face of little change, we should ask: Who profits the most? Or, we should ask ourselves who the primary beneficiaries are. In *Strategizing national health in the 21st century: a handbook* Schmets, Rajan, and Kadandale (eds) report

that:

In the 2016 WHO report Public financing for health in Africa: from Abuja to the SDGs, WHO concluded that "for every USD 100 that goes into state coffers in Africa on average USD 16 is allocated to health, only USD 10 is in effect spent, and less than USD 4 goes to the right health services" (Schmets, Rajan, and Kadandale, 2016, pg., 9).

One might well wonder of New Zealand how much of every dollar of New Zealand taxpayer's money goes into funding our Public Health System - how much of that is spent on the 'right services'.

One might think that I have not presented a sufficient case, here, that the primary beneficiaries of unhealthy housing and lack of access to resources needed to attain health *intended* this to be the outcome of their investments. In response to this the 'Knobe effect' is an experimental philosophy finding that generally people do not think that one needs to intend harms (e.g., to the environment) in order to be responsible for the pursuit of profits when the harms are forseeable. On the other hand, in order to be responsible for beneficial outcomes, one must intend the benefits and it is not enough that they be a mere by-product of the pursuit of wealth. Whether or not government and other high level officials have intended to profit themselves at the expense of others they are responsible for the present situation and for the trajectory of those things in New Zealand society.

In this chapter I have introduced the notion of inequality (of income, wealth, and health). I have provided some evidence that New Zealand is doing badly on both counts: at generating wealth (compared to other developing nations) and at distributing that wealth equitably amongst its people. I have provided some evidence that the projections are that inequality in wealth in New Zealand is increasing and we are seeing a greater and greater division between the haves and the have nots in New Zealand, and a greater proportion of us are making it into the have not category as time goes on. I have considered how failure of the New Zealand Government to legislate (e.g., building laws, wage laws, tenancy laws) and policy (e.g., sale of state owned assets especially houses) has contributed to this situation. I have asked a number of questions about who the primary beneficiaries of particular policies or regulations (or lack thereof) have been - given what we know about the trajectory of inequality and inequity in New Zealand. In the next Chapter I will introduce the idea of equity groups of people before turning to the United Nations and World Health Organisation as higher level organisations that our government is accountable to for the good of the people of New Zealand. We can then consider the flow of money from international agencies to the New Zealand government to district health boards and universities for purchasing of goods and services from the public and private sector.

# Chapter 3

# Equity groups and statistical parameters

In this chapter, I will introduce different notions of kinds or ways of defining groups on the basis of different features that are defining of group membership. I will then settle on the notion of a statistical parameter that is agnostic on stabilising mechanism and can be defined however the researcher likes in the search for strength of association. I am doing this because it is the notion of a statistical parameter that is currently employed in a variety of contexts including economics, finance, and health. This will enable us to see that we can consider equity groups from the perspective of groups that are biological or social or political or nominal where we only care about associations and not commit to anything about the nature of the stabilising mechanism for the kind.

## 3.1 Kinds of kinds

In the philosophy literature, there is a standard distinction between mathematical abstracta, natural kinds, social kinds, and nominal kinds (see, for example, Bird and Tobin, 2018). I will briefly introduce them here, in order to raise some issues around natural kinds. I will then briefly introduce the notion of statistical parameters (e.g., sex at birth, race, NZ-deprivation score) that are used to group or type people for purposes of prediction. We will then be in a position to consider some of the 'equity groups', or parameters that have been associated with bearing the negative end of the inequality in the past, how we arrive at inequalities in the present, and how we can use this to predict likely future for the purposes of investment or avoidance or some combination of these ends.

Mathematical abstracta (e.g., circles, triangles, equilateral triangles) have essences or natures that an object must have in order to count as members of the kind. This essence or nature is something that can be determined a priori. We can define up mathematical abstracta. For example, (the standard story goes) 'an equilateral triangle is a three sided closed plane figure with sides of equal length'. These conditions are essential for something to count as an equilateral triangle: These conditions are individually necessary and jointly sufficient for something to count as an equilateral triangle. All and only those things that meet those conditions are equilateral triangles. While this might seem far removed from equity groups, we will go on to see that the primary way of viewing equity groups are as statistical (mathematical) parameters. It is by regarding them to be statistical (mathematical) parameters that we have come to accumulate a body of knowledge about those things and it is in regarding them to be statistical (mathematical) parameters that people have gotten rich investing in likely futures. While the metaphysical issue of whether equity groups really are statistical (mathematical) parameters in this thesis my concern is more one of where the money goes so we are following this issue from the perspective of who is getting rich.

There is some controversy over whether mathematical abstracta exist independently of our defining them up (e.g., in an abstract or Platonic realm), or whether they are created as abstracta by way of our defining them up, as some kind of performative utterance - but the basic idea is that the essence or nature of these things is a priori. Hunting about in the natural world will not help one get clearer on the nature of triangles. There aren't any actual triangles in the natural world, anyway, only dim (and imperfect) copies of triangles - or, depending on one's theory of abstracta, imperfect instantiations.

Natural kinds, on the other hand, are thought to have essences whose nature is to be a posteriori discovered by the natural (physical and life) sciences (see for example, Putnam, 1973, 1975, Kripke, 1980). Paradigmatic instances of natural kinds include substances or stuffs - such as water and gold, and living things - such as lions and elm trees. An example of the success of science was the discovery by the physical chemists that water was H<sub>2</sub>O. The idea is that a priori (on a narrow content view, anyway) water could have turned out (it was conceivable that it turn out) to have been any number of things e.g., H<sub>2</sub>O<sub>2</sub> or H<sub>2</sub>O<sub>3</sub>, or perhaps even H<sub>3</sub>O<sup>+</sup>. A posteriori, a process of scientific investigation and discovery resulted in our coming to understand its true nature, however. All and only pure samples of water have chemical composition H<sub>2</sub>O and that substance in a liquid phase (the standard story goes) is water.

One may well have hoped that microbiology / genetics would do for biological creatures what physical chemistry had done for substances or stuff. The standard story, however, is one in which genetics had trouble distinguishing between a person and a fruit fly - because of the high degree of relatedness of life and the mind-bogglingly large amount of DNA contained within chromosomes comprising the genome of living organisms (see, for example, Shih, Hodge, and Andrade-Navarro, 2015). It might be the case that we will end up with something more like individually necessary and jointly sufficient conditions for species membership out of genetics - eventually. Currently, there are limitations involved with the cost of sequencing (between organisms, and also assessment of variation between cells within the same organism). Currently, there are technical limitations involved with processing the genetic data. More sophisticated software analysis might be able to recover some of the apparent certainty we had with the analysis offered by chemists, in other words. Putting this to one side, the standard line in philosophy has become one where rather than looking to microbiology and genetics for fixing biological species membership, we should turn to evolutionary biology and the notion of ancestral relations. In practice, we turn to statistics and the discovery of statistical associations or degree of relatedness / genetic similarity in whatever parameters we have defined up.

The idea that a single species can evolve into two distinct species over millennia has been interpreted by some as an undermining of essentialism about biological kinds. On the other hand, while the periodic table of elements appears non-gradualist it is possible to transition one kind of substance into another kind of substance (at great cost - e.g., via use of a proton gun). Also, there may well be an evolutionary account of the consolidation of matter after the big bang. So, perhaps the idea of transition from one species into two distinct species need not undermine essentialism about biological kinds in biology any more than taking gradualism seriously in chemistry would undermine essentialism about the substances listed in the periodic table of elements. Nevertheless, atomic number is necessary and sufficient for determining which element a sample is a sample of but there have been no genetic markers that seemed able to play that role for biology. Still, there is much that we don't yet know about genetics. The idea is still one of our deferring to the authority of the natural sciences when it comes to where to look for the nature of biological species or kind membership.

Social kinds have been raised as something of a contrast class to biological kinds though both are regarded as empirically discoverable kinds that are standardly contrasted with mathematical abstracta. Sometimes the issue is cast as one of nature (biology) vs nurture (culture). The kinds (or statistical parameters) that we will go on to consider might be regarded more as cultural kinds than as biological kinds. There has been quite a lot that has been written on social kinds e.g., psychological categories like emotions and institutional kinds like banks and universities (see, for example, Griffiths, 1997 and Hacking, 1999). In this thesis I consider medicine as a social institution or The Social Instistution of Medicine which I only mean as another way of considering medicine as a social institution among other social institutions such as education (The University) and finance (The Bank). People have argued that gender and race are not biological inevitabilities - they are social constructions (e.g., Haslanger, 2013). This is to say that any predictive power that we gain from knowledge of kind membership is due to contingent facts about our social institutions. I have much sympathy with this line. It is because it is possible to alter our social practice and create a more equitable future that our decision to not alter our social practice and create a more inequitable future is unjust.

Nominal kinds, on the other hand, are kinds 'in name only'. The idea, here, is that we may define an arbitrary set in any way we like and the only (potential) constraint would be non-contradiction. I can define up a mathematical object that I call 'blub' and stipulate that members of 'blub' are: the letter 'a', the number '2', my left sneaker, and the moon. Of course there isn't much of anything else that I can say about blub. It has 4 members and the members don't seem to have anything in common other than being members of the category or kind blub. While one might think that nominal kinds don't have essences, one might reply that they share the essence of being members of the kind. This essence seems to be a fairly useless sort of a feature, however. More importantly than lacking an essence, the standard story goes, the problem with nominal kinds is that they are not projectable. If we know that something is a member of kind blub, we can't predict anything more about it.

Disjunctive kinds that are standardly thought 'non-natural' because they are an abitrary set such as duck-rabbit - where something is a duck-rabbit if and only if it is either a duck or it is a rabbit - are projectable, however. A disjunction of duck-rabbit projectable features is predicable on the basis of knowledge that something is a duck-rabbit. The disjunction of blub features would allow us similar predictive leverage. There may be a story here about greater precision being afforded to 'better' or 'more natural' kinds. Gruesome categories seem to me to pose a very genuine problem to do with projectability and a problem that is something to do with going on in the same way. In some moods I think this is a genuine problem, in others I don't see the problem. I won't have anything more to say about these issues in the standard literature of analytic philosophy.

In this section we have considered different views of kinds: mathematically defined, natural kinds, evolutionary kinds, social kinds, nominal kinds, and disjunctive kinds. Each of these had a different notion of what stabilised members of the kind as members of the kind, or, in other words, a different notion of what was essential for something to count as a member of the kind. The point of this section has been to introduce something of the range of views that has been held for scientific or quasi-scientific kinds in the history of philosophy. Let us now turn to kinds of people, more particularly, before I go on to introduce something of the range of equity groups that have typically been considered. This chapter will end with the notion of a statistical parameter and the idea of getting rich betting on likely futures for people on the basis of their statistical parameters / equity group memberships.

## **3.2** Case studies in kinds of people

People have long been interested in this notion that there might turn out to be importantly different kinds of people. For example, people might come in the kinds male and female where it is natural that males do the work to earn the money and females do the childcaring and homemaking. People might

come in the kinds black and white and yellow with innate biological differences including increasing amounts of innate mathematical aptitude. People might come in biologically constrained castes or classes such as the ruling class, the working class, and the petty criminals, and vagrants. People have long seemed rather obsessed with distinguishing between 'me and mine' vs 'the other'; the 'in-group' and the 'out-group'. There has been much work devoted to whether humans do come (biologically) in different kinds, or whether differences that we observe are more superficial than real (e.g., in the case of skin colour) or as contingent factors of our socialisation, or as induced by institutional / environmental factors (e.g., mental retardation arising from unequal exposures to chemicals / toxins) rather than as a matter of biological inevitability quite aside from our social practices. This seems important because if differences are not biologically inevitable, if it turns out that they are 'avoidable' by way of legislation or alteration to our social practices - then the induction and / or maintenance of inequalities might be thought to be inequitable - in the sense of being unjust.

In Chapter 2 I introduced the HEAT model where the focus was on the 'unearned privilege that some groups have acquired as a result of inequalities' (Signal, Martin, Cram, and Robson, pg., 10), or who the primary beneficiaries were. Despite this, the identification of 'equity' groups has in practice not involved our identification of who the primary beneficiaries are (e.g., a certain sub-group of white ancestrally northern European males with prime urban real estate holdings - and their families) but rather an identification of those who are the victim of inequities.

#### In New Zealand:

health inequalities have been associated with an array of social factors, the most consistently interrogated being class or socioeconomic status, gender, ethnicity, and geographical location... How these social factors impact on health depends on how they interact with each other, as well as the particular historical moment and its specific alignment of politics, economics, culture and social practices (Matheson and Dew, 2008, pg.,9).

Let us now briefly consider the different equity groups that have been proposed in the New Zealand context. Note that this involves our identifying not who profits from the way that things are, but rather identification of the current victims of inequality.

# 3.2.1 Biological sex, gender, sexual orientation, marital status

While it was traditional to think that people came in one of two kinds: male and female, the reality is more of a genetic, morphological, and behavioural continuum. Genetically, more variants are possible for humans than XX (female) and XY (male). Morphologically, the development of the foetus is typically described as one in which female is the 'default development' (Le, Bhushan, Sochat, and Chavda, 2019, pg., 608). The 'sex determining region' on the Y chromosome (the SRY gene) initiates the pathway for testes to develop. In the absence of SRY, the gonads develop into female sex organs. If a live birth produces an infant with a non-functioning penis, common practice has been to remove male gonads for a closer approximation to female morphology. This is done largely for convenience because so much of our society is structured around bioloigcal sex (e.g., public bathrooms and changeroom facilities, constant requirements to state gender on forms and birth certificate as verification of sex).

Gender identity is something that can come apart from biological sex at birth. There has been controversy over whether appropriate treatment for Gender Identity Disorder (if we view it as a disorder) is sex reassignment surgery / treatments to alter morphology, or is psychiatric or psychological treatment to alter the mental acceptance of the morphology. Western society has not typically been very accepting of cross-dressing or trans-gender people perhaps because it has not typically been very accepting of people with non-normal physical morphology. Other cultures have been different, however, with eunuch and third gender accepted as more culturally normal ways of being (Nelson, 2014; Tan, 2016).

Homosexuality used to be considered a disorder but is no longer. It was also criminalised but largely is not anymore. Still, many people claim they feel targeted for discrimination on the basis of their sexual preference. Similarly, there has traditionally been pressure on people to marry - perhaps to indicate in some way that they weren't homosexual. There has been this idea that an upstanding person should take a wife and have children (e.g., as a requirement for integration for immigrants) and this notion that there must be something wrong with the person if they do not choose these things. Most of the discrimination against homosexuality, traditionally, was against men.

With respect to gender, we have the majority - minority group of women. A majority - minority is a supposed minority group who are statistically a majority group. For example, poverty is a majority - minority group insofar as poverty is more the rule than the exception and when poor people are a minority in the sense of their being marginalised or having control over a minority of resources. Women comprise over half the population yet traditionally women were largely confined to roles that were thought to be suitable for them because of their biological inferiority when compared to the male ideal. Of course, when there was no suitable first born male, or no suitable male, the lot of females (of certain classes, anyway) was much better as they were able to take up positions in society that were not available to them when a first born male was around. Women were expected to step aside and defer when there was a male in the vicinity, however. Women were typically characterised as being the 'weaker' sex who are not capable of physical labour or sport as men were. Women were thought to be prone to injuries because of their deformed anatomy that was weaker and intrinsically inferior to the male body because it has been deviated from the physical ideal for the sole purpose of childbearing. For example, increased femoral Q angle due to a pelvis widened for childbearing has been thought to make women more susceptable to knee injuries (e.g., Fatahi, Sadeghi, and Ameli, 2017).

Traditionally, such differences were interpreted as evidence that women were less suited to sports. Differences in male anatomy (e.g., the prevalence of hernia due to space in the abdominal wall to allow for descent of testes) were not typically interpreted as sign of a congenital weakness or deformity that should result in extra care during activities such as the sport of Olympic Weightlifting, however. There is still concern that while representation of women is increasing (e.g., in Medical School), there is more expectation that they will defer to other males - either by choosing to marry a doctor on graduation and / or by selecting a speciality in which there is less male competition and 'lean out' (Meirion Thomas, 2014). Women are over-represented in less competitive specialities such as family medicine, psychiatry, pediatrics, and obstetrics/gynecology and underrepresented in more competitive specialities such as surgery, emergency medicine, anesthesiology, radiology, and internal medicine (Vassar, 2015; Le, Bhushan, Sochat, and Chavda, pg., 13).

Similarly, female sensibilities - diplomacy, co-operativity - were thought to be the products of a mind that was inferior to men. Female minds were thought to be deformed from the masculine ideal, again, for the purposes of childraising. The cyclical nature of women's natural hormonal cycle was thought to be appropriately characterised as a natural imbalance and as unreasonable unpredictability. There were arguments around not allowing women a university education - not least because allowing women to study at university was thought to be something that would be likely to distract men from their studies. Mostly, those who were the primary beneficiaries of the subjugation of women were not responsive to reason when it came to not only allowing women to pursue things that were traditionally reserved as the preserve of a few elite men, or to allowing women reproductive control over their own bodies instead of having their fate determined by men.

We hear that much progress has been made for women, in developed nations, in recent years. For example, Rashbrooke relates how in the development of New Zealand:

In the workplace, the gap between women's and men's earnings has narrowed since the 1972 Equal Pay Act was passed, but progress has slowed in recent years. The gap in average hourly earnings is now about 13 per cent, and is much wider for weekly or annual earnings. Women are over-represented in part-time work and do less overtime (Rashbrooke, 2013, pg.,5).

We also hear how:

Another factor in the pay gap is the lower proportion of women promoted to senior positions within almost every occupation, including Parliament and company boards. Women are also concentrated in particular occupations and sectors, many of them low-paid and, arguably, undervalued (Rashbrooke, 2013, pg., 5).

We can consider that things may have improved for women in more recent years. A recent increase in wages for those on low levels of wages in the 'traditionally female' occupations of aged care might be viewed as a victory for women insofar as it improves the status of a profession that was traditionally a female preserve. On the other hand, we have already considered in Chapter 2 how pay increases for chief executives (traditionally a male preserve) were around 20-25 per cent, per year. In other words, it does not seem to be the case that pay increases (across all fields) primarily benefited women. In other words, while women may have benefited slightly, other groups benefited even more so and the amount or degree of inequality between groups increased.

On the other hand:

A girl born today can expect to live for more than 80 years if she is born in some countries - but less than 45 years if she is born in others (Commission on Social Determinants of Health, 2008, preamble).

The natural sex ratio at birth is often considered to be 105 males for every 100 females. If a country's population sex ratio does not equalise or exceeds the 105 threshold 'this means societies with a dominating preference for male child tend to intervene in nature and reduce the number of born girl child by sex-selective abortion and infanticide' (World Health Organisation Regional Office for South-East Asia, 2018). This shows us that discrimination against females is not a thing of the past but is of concern in the present. The World Health Organisation tries to make governments accountable for these kinds of statistics (the birth rates of males compared to females) apparently out of concern for all peoples. The lot of women in life where there is no birth control and / or where there is a high prevalence of crime against women (i.e., rape) is a world that is very harsh on women, indeed. It is a lot where biological difference (the fact that women bear children and not men and women lactate and not men) has a significant impact, indeed, on the sort of future a woman can have. It is important not to undervalue the role of access to birth control for women when it comes to the empowerment of women to futures that are not inexorably tied to inequalities of biology.

One criticism of the idea that there should be equality between men and women

is that the high standard of living enjoyed by men could not be sustained across at least twice as many people. One response to this concern of the millenium development goals (as we will see in the next chapter) has been that generally the high standard of living enjoyed by some could not be sustained across an exponentially growing population forever so that all might live as the most wealthy do. One response to this concern of exponential population growth has been a focus in the sustainable development goals on empowering women by way of providing them with greater access to birth control. While it is not the case that all women would choose not to have children when they are not likely to be able to raise them with access to certain resources, it is very likely the case that significantly fewer women would choose to have as many children into poverty and deprivation when they have the means to prevent this. Because of the inequalities in morphology (with females bearing the foetus for 9 months and with female lactation) the female body is required to bear most of the costs (compared to the male body) of child-birth and the initial phase of childraising. Access to medical technologies and infrastructures (e.g., birth control, breast-milk co-ops, infant milk formula) have loosened the grip of biology for determining the fate of the female body.

There used to be a lot of research devoted to trying to catalogue the 'natural' differences between males and females (e.g., Jones, Braithwaite, and Healy, 2003). These studies sometimes failed to distinguish whether the differences (if statistically significant differences were in fact found) were due to different socialisation or whether they were biological, however. Perhaps it was because girls are babbled to and groomed more but boys are jostled and rough-housed more that the behaviour grows to conform to these norms more often than not, for example. There was also research into intellectual differences such as boys being more mathematical and spatially inclined whereas girls were more social and verbal (e.g., Halpern, 2004).

#### 3.2.2 Racial ancestry, ethnicity, skin colour

Indigenous people are commonly regarded as equity groups in countries with a history of colonisation (e.g., Australian Aboriginal, New Zealand Māori, American and Canadian Native Indians). Certain other minority groups are also regarded as equity groups (e.g., Pacific Islanders in New Zealand, Torres Strait Islanders in Australia, Hispanic and African-Americans in the USA).

There used to be much work devoted to investigating the genetic basis of race (see for example, Wagner, Jooh-Ho, Ifekwunigwe, Harrell, Bamshad, and Royal, 2017). It is common, now, for people to acknowledge that the concept of race is more of a social construction than a biological one. Most people are of mixed ancestry, for example. There aren't any full blooded Māori without some European Ancestry in their recent few generations. The search for genetic markers had by all and only people with a Māori ancestor in the last, say, 12 generations, has not been forthcoming despite progress in genetic sequencing and decreased costs associated in accumulating masses of genetic data.

The concept of ethnicity has something to do with how people identify as being or on the basis of self report. People are often asked to state which ethnic groups they identify as being a member of on forms, for example. There has been much controversy over whether 'New Zealander' is an ethnicity or whether people claiming to be 'New Zealanders' were racist insofar as they were denying differences between Māori and non-Māori for the primary benefit of non-Māori. People stating 'New Zealander' have been recoded as non-Māori in New Zealand in our recent history with this interpretation of their behaviour as the primary motivator (Cormack and Robson, 2010, pg., 10,15).

Skin colour, or physical appearance is something that people can't really change about themselves - though of course there is a multi-billion dollar industry in skin lightening products where lighter colouration is perceived as more desirable (Khan, 2018). While some people with claim to ancestral indigeneity or ancestral equity group status would not be classified or appreciated as such on the basis of physical appearance, other people are fairly readily identified or classified by others as such. In Australia, for example, part of the stolen generation was about identifying youths who appeared non-Aboriginal and attempting to raise them as non-Aboriginal orphans in institutions. A number of Māori are also not visibly identified as such.

Some (but not all) people may be in the position of being able to choose what they say with respect to their ancestry, and choose what they say (and choose what cultural behaviors they express or participate in) with respect to their ethnic group membership. People can't really choose their skin colour, but people can choose to adopt or refrain from elements of cultural dress.

The primary reason why we are supposed to regard indigenous people as equity groups rather than simply dismissing their misfortune and hardships is because colonisation posed a very real threat to these peoples. Resources were taken from them such that they were unable to continue on with their way of life. Rather than being treated as persons and being traded with fairly in a way that was of mutual benefit colonisers were the primary beneficiaries of trade (or war) with indigenous people. I will have more to say about mutual benefit, fair trade, and sustainability contrasted with dissolution and / or war in Chapter 5. In this chapter my focus is on how it is because of this history of inequality of access to resources needed to attain health that we are supposed to be particularly mindful of allowing indigenous people to be included in the development of the nations they are included as a part of now. Genocide is regarded as a war crime but it is often less clear whether there is genocidal intent in situations where a certain race or cultural group of people is clearly being exploited to the benefit of some other group of people. For example, it was considered an attempt at genocide that the Nazis were intending to exterminate the Jewish people and the Gypsies. It was not considered genocide that the English failed to intervene during the Irish Famine (e.g., by stopping food exports from Ireland or by legislating to return land to the Irish people instead of requiring them to pay rent to English Gentry by way of property managers).

The UN is interested in statistics around birth rate and death rate and age of mortality partly to keep an eye on whether a group of people appear to be bearing the brunt of discrimination and to keep track of patterns that suggest persecution. This is why the New Zealand Government is supposed to keep an eye on Māori health statistics. If the inequality becomes too great between Māori and non-Māori in New Zealand then the Government might be accused of racial discrimination resulting in genocide or an attempt at genocide towards the Māori people. The Government has a duty to legislate to eliminate certain kinds of inequalities between Māori and non-Māori.

There has been much made of trying to separate out the effects of being Māori from the effects of being poor. The idea is that perhaps the worse outcomes for Māori are not race based inequalities if it turns out that being Māori has been confounded with poverty. In other words, if it appears that Māori have worse health than non-Māori we need to control for poverty because more Māori are poor and we have already considered the socio-economic gradient to health.

### 3.2.3 Geographical mesh block

Inequality in geography has typically been about differences in life chances between people of high vs low income countries. For example, the difference in mortality for infants born in South Africa compared to Norway or the United States of America. Sometimes the focus has been on differences in geographical region or location within a country. For example, differences in life chances for people in the densely populated city of Hong Kong compared to people living in sparsely populated rural China. Or, as another example, differences in life chances for people living in densely populated cities such as Sydney or Melbourne compared to people living in the sparsely populated Australian outback.

More recently we have this notion of a mesh block unit and the 'level of deprivation' we can associate with various mesh block units which contain around 90 people. Mesh block units are the smallest geographical unit or grid of space in which people reside that has been defined by Statistics New Zealand. We can consider various statistics about mesh block units such as the average age of inhabitants, the number of inhabitants, the average income of inhabitants, the average level of educational attainment. We can also consider features of mesh block units such as proximity to various social services and accessibility of various aspects of infrastructure to do with, for example, water source, soil type, air pollutants and so on.

#### 3.2.4 Poverty and the NZDep score

A measure of poverty in New Zealand is the NZDep Index of socioeconomic deprivation for small areas. It is an area-based measure combining variables from census data. The areas are built from one or more contiguous meshblocks. These blocks are given scores from 1-10 where 10 indicates the most deprived 10 per cent of small areas with respect to each of the measured indicators of deprivation. While it has been noted that the level of deprivation experienced by individuals living in a mesh block may vary (e.g., the bulk of the resources might go to the first born male), it has been a common practice to take NZDep score as an indicator of an individual's level of poverty (e.g., to assess the socioeconomic status of people in Health Science Professional Degree Programs (Crampton, Weaver, and Howard, 2012; 2018)).

There has been fairly surprising reluctance to consider poverty (or the poor) to be an equity group because it is analytically true that if there is a distribution of wealth in a society then there always will be people in that society, that are in the lowest 10 per cent of the distribution. Typically, the idea is that Māori, or people with disability, or refugees, for example, are equity groups because more of them experience poverty (see, for example Walters, 2018), but poverty itself is often not considered an equity group. Prevailing theory in economics does not consider poverty to be an equity group and does not consider that inequality (i.e., of wealth) is tied up with inequity - (that extreme differences in resource distribution is inequitable). This conflicts with the intuitions the World Bank attempted to pump, as we saw in Chapter 2, that gross differences in lifes chances were intrinsically unjust. Instead, poverty is considered inevitable because life is about taking what you can for as long as you can because you can since there is never enough some people simply will miss out and this is the struggle for survival that is the game of life. This is a view that we saw in Chapter 1 on economic theory and Chapter 5.

The socio-economic gradient that those lower in socioeconomic status have less access to health and health resources isn't typically thought to be a problem from the prevailing perspective of economics. Because NZDep score is a relative measure of poverty (where one is located in 10 per cent brackets), it is focused on position in a social hierarchy rather than being independent of where others in society are positioned. It is thought to be inevitable that some will have and others will not. The socioeconomic gradient is thought to be a fact of life rather than an injustice. Equity is thought to be tied up in other notions such as gender or race. Typically, the notion of equity is tied up with the idea that there will be a decrease in overall equity (e.g., gross domestic product) if we keep subsidising people for their gender or race. Gender or race are thought to be things that it is appropriate to subsidise people for since they bear greater costs in virtue of their race or gender.

#### 3.2.5 Disability

Prevailing theories of economics don't consider people with disability as an equity group, either, because disability is something along the lines of a poverty in health. That people with disability have worse health outcomes is something that is thought to be conceptual, rather than contingent. We saw in Chapter 1 that the prevailing practice in the economics of health is to focus on DALYs to calculate the inevitable cost of disability and the tragedy of counting how many years of healthy life were lost to disability rather than on focusing on how the tragedy is largely the result of how we treat people with disability. Consider the following description of disadvantage for deaf people with respect to their access to education:

Most sign language users have been deaf since infancy, and the resulting disruption to language acquisition typically has far-reaching developmental and educational impacts. Internationally, the prevalence of pre-lingual deafness is about 7:10,000. The deaf NZSL community is estimated at approximately 4,500.

In New Zealand prior to 1980, sign language was censured by schools and society as a means of communication. Intensive pedagogical focus on the mastery of speech was at the expense of a comprehensive education for many children. Deaf children tended to sign to each other and thus NZSL began as an underground language, which has developed through intergenerational networks of deaf people who claim a cultural identity. Today, human rights measures - particularly the United Nations Convention on the Rights of Persons with Disabilities have led the education system to recognise the importance of sign language to deaf people's access to society, yet not all deaf children have timely access to NZSL, and educational disadvantage persists for this population. (Witko, Boyles, Smiler, McKee, 2017 pg., 53).

While people are told they can request language interpreters for a number of languages in our health system, they are not typically informed they can request NZSL interpreters. New Zealand has been reluctant to accept NZSL as a language of this country. This has consequences for the health of deaf people and for their ability to understand what is going on in health appointments. This helps us understand the idea of deaf culture as a difference in communication rather than a deficit and the idea of NZSL as a language and not allowing this language difference (not disability) to disable deaf people when it comes to their health care and their education. The idea is that a fully inclusive society recognises and values disabled people as equal participants where their needs are understood as integral to the social and economic order and not identified as "special".

Now we have considered both the range of different theories of kinds or group membership and the range of different equity groups that have been considered in New Zealand and overseas contexts. We have gained an appreciation of the messiness of kinds with respect to the diversity of the stabilising mechanisms or essential features for kind membership. We will now turn to the notion of a statistical parameter which has been used to define or measure equity group membership and associations between members and various features including proxies for health and wealth.

# **3.3** Statistical parameters

Statistics provides us with a way of describing and quantifying difference with respect to whatever parameters we choose to plug into our models. We can collect data on whatever parameters we like and run a variety of statistical tests looking for associations. Instead of considering the previous categories as some kind of group (e.g., a natural kind, a social kind, a nominal kind), we will then shift to considering equity group membership as a label for a value of a statistical parameter.

When it comes to which differences are relevant it is important to realise that the relevant differences are between groups of people. To illustrate this, let us consider Jane and Joan who are identical twins who were born in Australia. Jane develops a rare form of cancer, or maybe Jane gets hit by a bus. Either way, while these are differences in health status, these differences are between individuals rather than between individuals on the basis of group membership. Contrast Jane and Joan with Nthabiseng, Pieter, and Sven, who were introduced to us near the start of Chapter two. We considered the differences in their life chances with respect to education, and life expectancy. While Nthabiseng, Pieter, and Sven are proper names, they weren't descriptions of actual individuals and there may be no particular individuals who exemplify those averages just as there may be no particular individual who exemplifies the average height and weight and so on. The idea is that something very much like what is the case for these idealised descriptions is the case for a significant number of very real people, however. Health outcomes (life expectancies) vary depending on country of birth and it is these differences between people on the basis of their group membership that is relevant to health inequity.

There are different kinds of variables in statistics which can be treated as dependent or independent variables or dependency can be infered by different kinds of association. Sex, or gender, is typically regarded as binomial (either male or female and not both). Treating sex or gender as binomial means that statisticians have no way of classifying individuals who are unwilling or unable to be classified in the standard box (due to genetic difference, gender identification, accident etc). On the other extreme, a variable might be continuous in nature – such as birth date and time - that we render discrete in various ways. We could render it discrete as an interval e.g., same day, same year, same 10 year block. We could make age to be a binomial variable (e.g., under 30 years as at day/month/year vs 30 years or over as at day/month/year). Whether age is blocked in one or another of those ways may give us different results with respect to what our tests say about the association between age and some other variable. Or different ways of blocking or grouping might give us different results with respect to what our tests say the relationship is between a variable (e.g., a medication) and an outcome (e.g., no longer meets criterion for depression) once we have excluded certain people (e.g., people under 20 years and people over 50 years and people with co-morbidities and people who are on various other forms of medications).

There are other ways of rendering continuous variables discrete; for example, it might be the number of steps taken per day as measured by one's personal communications / surveillance device. The number of steps is nominal, let us say, as there is a particular and discrete number of steps. One might measure the association between age and number of steps – or one might block one or both of them into coarser grained categories and look for associations between blocks. Different ways of grouping will give us different associations between groups. There is an art to grouping in various ways in order to find associations for various ends.

In doing statistical tests one can do a 'one sided test' looking for whether there is an increase in x for an increase in y or a 'two sided test' looking for whether there is a difference (increase or decrease). Which tests we run affects which differences we might be able to find. If we aren't interested in discovering that an increase in a particular exposure is harmful – then we need not run a two sided test that could possibly reveal that it was. We have also learned that there are dangers extrapolating from adult age blocks, for example to children (e.g., antidepressants and suicide in teenagers) and perhaps at the other end dangers extrapolating to elderly people (see, for example, Lindley, R, 2012 and Joseph, Craig, and Caldwell, 2015.) The point here is that statistics allows us to group or block or 'bin' people in various ways. It isn't the case that age or gender or indigeneity are objectively existing categories for us to discover information about. Let us just consider one more example, the example of indigeneity. Firstly, we could group people on the basis of self report in answer to a question along the lines of 'which of the following ethnic / cultural groups do you identify as being?' and providing Māori as a selectable response. Alternatively, we could group people on the basis of self report in answer to a question along the lines of 'which of the following ancestries do you identify with? We could be more explicit about this in (for example) requiring a 'verification of ancestry'.

To understand how each of the above will select different people we need only consider that Māori have adopted people who are not ancestrally Māori and some ancestrally Māori people do not regard themselves as culturally Māori. Whether Māori is a group that is self-selected or whether it is a group that is other-selected (and how it should be other-selected) is controversial. Sometimes the attitude has been that coders should over-ride individuals' self report. For example, some ethnicity coders have reclassified self-proclaimed 'New Zealanders' as 'non-Māori' on the assumption they are middle class white Southern males intending to obscure discovery of difference in Māori populations in order to further benefit non-Māori New Zealanders (Cormack and Robson, 2010, pg., 5).

The statistical differences relevant are meant to be avoidable and remediable. To illustrate this, the standard example is height and stunting or growth retardation that is associated with malnutrition. If we find a statistically significant difference between the height of people of different ethnicities, then if the difference is 'avoidable' and 'remediable' – e.g., by providing adequate nutrition to both groups – then the difference can be relevant for health equity. This is to be contrasted with people of different ethnic groups having differences in height that aren't due to malnutrition. Another example of differences that aren't equity candidates are differences in skin colour or eye colour. The differences that are relevant need to be avoidable or remediable. Genetic differences may or may not be. For example, if a certain group has a disposition to a disease such as Tay Sachs disease then that disease might be less avoidable for that group of people. On the other hand, technology may offer ways for that population to avoid or remedy that disease. My aim here is not to solve this simply to raise it in all it's messiness.

The differences are meant to be in determinants or in access to health related resources. This shifts attention away from health outcomes and into the things that are supposed to be the relevant causes of the differences in health outcomes. The Commission on the Social Determinants of Health (SCDH, 2008, pg.182) presents recommendations as to what data should be collected for the purpose of equity and protection of human rights. It is quite specific with respect to what groups the World Health Organisation considers to be of primary importance for equity consideration. Equity includes information on health outcomes stratified by:

Sex, at least two socioeconomic stratifiers (education, income / wealth, occupational class); ethnic group / race / indigeneity; other contextually relevant social stratifiers; place of residence (rural / urban and province or other relevant geographical unit); The distribution of the population across the sub-groups; A summary measure of the relative health inequity... A summary measure of the absolute health inequity...'

Health Outcomes include:

Mortality (all causes, cause specific, age specific); ECD [early child development], mental health; morbidity and disability; self-assessed physical and mental health; cause specific outcomes.

Determinants of health include stratified data on:

Daily living conditions

Health behaviours - smoking; - alcohol; - physical activity; - diet and nutrition;

Physical and social environment: - water and sanitation; housing conditions; - infrastructure, transport, and urban design; - air quality; - social capital;

Working conditions: - material working hazards; - stress;

Health care: - coverage; - health-care system infrastructure;

Social protection: - coverage; - generosity.

Structural drivers of health inequity:

Gender: - norms and values; - economic participation; - sexual and reproductive health;

Social inequities: - social exclusion; - income and wealth distribution; - education;

Socio-political context: - civil rights; - employment conditions; - governance and public spending priorities; - macroeconomic conditions.

The point of enumerating this list is to illustrate that this is a great volume of wide ranging data that may supposedly be collected in the name of reporting on health equity. They also consider the consequences of ill-health can be economic and social.

The first section on health inequities seems to be identifying the groups that are of 'special interest' as equity targets. While some seem to be global equity targets (e.g., women, indigeneity), there is scope for 'other contextually relevant social stratifier[s]' for nations to identify their own minority target groups. The first section also introduces the idea of summary measures of health inequity including population attributable risk which has to do with the increase in prevalence that is attributed to group membership, otherwise known as the 'burden of disease' associated with group membership.

The second portion on health outcomes lists health outcomes thought to be relevant for inequity. Disability and mental health appear here and not as groups in the previous section and / or as determinants in the next section. This explains why on the one hand, some people do not think that disability is or can be a group of equity consideration. On the other hand, the flexibility in how groups are defined does allow a community to, regard people with a specific health status (e.g., HIV positive, history of mental illness) to be an equity group if they have concerns about injustice or human rights. For example, to consider how HIV positive status alters the determinants of health so as to promote worse health outcomes for people with HIV. In the next chapter we will turn to people with disability, the disabled, or disability as an equity group more in particular.

The third portion on determinants lists quite a range of variables to be tracked and reported on, and this is a report only on social determinants. The Dahlgren and Whitehead Model (1991) or the 'Rainbow Model' is another popular model of determinants of health that does not commit to the determinants being social. The model is similar to the World Health Organisation analysis and provides a nice visual summary of living and working conditions and how these wrap around individuals at the centre. The model is person-centred but the focus (for surveillance and intervention) is on the 7 categories (determinants) that fall under living and working conditions.

The broadest or over-arching category is 'general socioeconomic, cultural and environmental conditions'. Nested under this, we have living and working conditions which include: agriculture and food production, education, work environment, unemployment, water and sanitation, healthcare services, and housing. Nested under those, we have social and community networks. Nested under that, and closest to the individual, we have individual lifestyle factors. We then have the individuals with their particular age, sex and constitutional factors.

We have thus far considered data collection (in the name of health equity) and how data that is collected can tell us about differences between groups. We have considered that differences between groups can be magnified by limiting opportunities for variation in members within a group. We know that businesses use data typically for the purposes of increased profits. We know that generally it is poor people and people who don't have the power to hide from data collectors that are the subjects for data collection. For example, Work and Income might collect information on how beneficiaries spend their benefit payments whereas the Government doesn't collect information on how politicians or chief executives or vice-chancellors spend their pay-checks. Poor people are rather more well studied than rich people. One might have concerns that 'vulnerable groups' are being targeted as objects of knowledge by people who are more likely to use the information obtained to further profit themselves at others expense than to genuinely assist members of minority groups. It seems fairly obvious to many that businesses have an interest in data collection typically to further the interests of business at the expense of the individuals whose data they have collected.

We will see in Chapter 4 that The World Health Organisation considered that what equity groups have in common is that they lack the power to access health / the resources needed to access health (WHO, n.d., paragraphs 1, 3). In Chapter 1, we considered how prevailing economic theories assumed that health was a a resource that was limited such that it is not the case that all people can be healthy. Since there is never enough health (or resources needed to attain it) to go around, we end up with the notion that it is something to be fought over. This is to say that there will be winners and losers, and obtaining health for some people means that other people will miss out. We might understand this as or by analogy with a case of pollution needing to go somewhere, and so better in other people's communities than one's own. Or, we might understand this as since we don't know whether certain levels of chlorine or fluorine or lithium or boron or oestrogen exposure are good, bad, or indifferent, then we will need to study the effects of such things. If we are going to learn how better to pursue health, then some communities will need to bear the costs of discovery. The idea is one that we saw introduced in the last chapter that inequalities that extreme or inequalities when it comes to distribution of certain kinds of resources are by their very nature unjust.

# **3.4** Capitation funding and assessment of risk

In 'Why are we weighting? Equity considerations in primary health care resource allocation formulas' Crampton and Foley set out to examine New Zealand's primary health care funding formulas with respect to the 'equity implications of using different weighting variables in funding formulas (2008, pg., 133)'. More specifically, they set out to examine the relative merits of socio-economic variables (such as socio-economic deprivation and ethnicity) and health variables (such as measures of mortality and morbidity).

The authors consider that New Zealand tries to ensure equitable access to health care using funding systems based partly or fully on need rather than on user pays. They state that about 80 per cent of total health care resources in New Zealand come from government sources that are dispersed on the basis of particular formulas. Public funds are allocated to the 21 district health boards largely on the basis of the number of people within each board's region, with the per-head allowance adjusted so young people, old people, those living in socio-economically deprived areas, and Māori and Pacific populations receive a greater per-capita allowance (consistent with their greater need for health service). Further adjustments are made for rural populations and those with high numbers of tourists (Crampton and Foley, 2008, pg., 133-134). A proportion of this allocation is then passed to Primary Health Organisations (PHOs) using four related funding formula: First-Contact, Services to Improve Access, Health Promotion, and Care Plus. We will go on to see how they explain these notions.

The authors describe the ethical foundation of this to be grounded in the 1938 Social Security Act which they interpret as embedding utilitarian principles which place value on 'promoting overall population health gain - the greatest good for the greatest number - as reflected in the provision, in 1938, of universal tax-financed primary and secondary medical care, and prescriptions, free of charge to the patient' (Crampton and Foley, 2008, pg., 133). They state that distinct from this is a commitment to distributive justice or fairness in resource allocation. They interpret this latter consideration as being given expression in the needs-based (rather than user pays) approach and state that there has been much discussion in the economics literature on the concept of 'medical need', that is usefully defined as the 'capacity to benefit' from health care.

They state that 'at a population level, need for health care resources is related most fundamentally to population size, as well as the age and sex structure of a population. Over and above population numbers and age, it is not possible to encapsulate need for health care using any single population characteristic. Hence, the measurement of need frequently focuses on summary health measures, such as the mortality experience of a population, or when such data are not available or are considered unsuitable, on socio-economic measures' (Crampton and Foley, 2008, pg., 135). And thus we have the population needs based approach to funding hospital and related services that was introduced in 1983 and has been the 'cornerstone of health service funding ever since, despite almost continuous restructuring of the health system (Crampton and Foley, 2008, pg., 135)'. The authors describe how the Primary Health Care strategy set out a 10 year strategy (2000-2010) for improvements to primary care:

Because one of the principal aims of the strategy was reducing health inequalities, the Ministry of Health recommended that additional resources be directed at those who have historically missed out on care (defined as Māori, Pacific, and those residing in deprivation decile 9 and 10 areas). Using deprivation and ethnicity in any First Contact formula was problematic for two reasons. First, there was not much evidence related to GP use by ethnicity and deprivation, and what evidence did exist indicated that these groups seek care at rates similar to the rest of the population despite being sicker (HURA Research Alliance *et al.* 2006; Scott *et al.* 2003). Hence, even if data could be obtained to support an allocation by ethnicity and deprivation, the resulting formula would cement in place historical inequalities and contravene the aim of the strategy (Crampton and Foley, 2008, p.g., 138).

It is hard to see why the authors think that providing DHBs and PHOs with more money to address the worse health outcomes of certain peoples would 'cement in place historical inequalities' unless one thinks that the authors are thinking that the primary beneficiaries of this approach are more likely to be non-Māori, non-Pacific, and wealthier than the lowest 20 per cent of socioeconomically deprived. Perhaps the authors are thinking that if the money was given to the people so they could purchase the healthcare they need, rather than to the DHB or the PHO, to provide the treatment they think these peoples should have, then this would be more in keeping with the aim of the strategy and not cementing the historical inequalities into place.

The authors say in another section that the Care Plus funding formula analysis 'suggested that people with high needs either were not seeking care at the same rate or, once enrolled, were not being identified as having certain chronic diseases. Hence, the SIA (Services to Improve Access) weightings were applied to the Care Plus formula so as not to perpetuate historical inequities' (Crampton and Foley, 2008, pg., 138). So, the idea seems to be that the additional money is provided to DHBs and PHOs in order for them to better identify (and presumably go on to treat) people with certain chronic diseases, that they had not been identified as having, previously. In support of this, we hear The Services to Improve Access (SIA) formula for 'Māori and Pacific enrolees residing in most deprived areas was based on 40 per cent of the amount by age and gender; with 20 per cent for those in less deprived areas with Pākehā enrolees in deprived areas also drawing a 20 per cent weighting (Crampton and Foley, 2008, pg., 137). The purpose of the risk-adjusted capitation is to 'ensure that plans will receive the same level of funding for people in equal need of health care, regardless of extraneous circumstances such as residence and level of income' (Crampton and Foley, 2008, pg., 138).

We hear that:

The primary health care funding formulas currently in use all use socio-demographic variables as proxy measures of need. These variables have the huge benefit of being readily available and relatively cheap to collect. The ethnicity variable, however, has proved to be vulnerable to political challenges. In the lead-up to the 2005 general election, the question arose in political and public debates as to why both socio-economic factors (deprivation) and ethnicity factors (Māori and Pacific) were included in the primary health care funding formulas - the so-called 'race-based funding debate'. Ostensibly, the answer to this question is straightforward enough, namely that epidemiological evidence strongly points to the fact that Māori health status is not the result of poverty alone. The fact is that even when socio-economic deprivation is taken into account, Māori health status is poorer than non-Māori health status. Therefore, at a population level, Māori ethnicity is associated with need for health services over and above need associated with socio-economic deprivation. This in turn provides the rationale for having both deprivation and ethnicity in the funding allocation process: they are both needs factors that have to be taken into account (Crampton and Foley, 2008, pg., 142).

We then hear that potential disadvantages of morbidity-based risk adjustment '[a]dds to administrative complexity and may increase administrative costs, leaves a large proportion of differences in spending unexplained, and is not adequate in explaining expenditure associated with high cost disorders (Crampton and Foley, pg., 143). We are also told that 'most risk-adjustment systems are designed to allocate future resources and this allocation is based in large part on past utilisation. Where certain groups have under-utilised services in the past relative to their health need, formulas based on past use will cement in place current funding inequalities. It is largely for this reason that ethnicity was not proposed for use in the PHO First Contact formulas: the available evidence suggested that Māori enrollees consulted their GPs as often or slightly less often than their Pākehā counterparts after taking health status into account (in other words, Māori utilisation of services was low in relation to need). The single greatest challenge is to include in formulas variables aimed at explicitly reducing health inequalities (rather than perpetuating historical funding patterns) (Crampton and Foley, 2008, pg., 145).

Māori, Pacific, and socio-economically deprived peoples have worse health than people who are not of these groups. We know that there is a socio-economic gradient to health for all peoples, but socio-economic status alone will not account for all of the disparities in health outcome for Māori and Pacific peoples. The Government is required to do something about this situation of inequality of access to resources needed to obtain health, however, both in the interests of fairness as we saw in Chapter 2 and in interests of honoring it's obligations under international law as we will see in Chapter 4. Only, it is unclear that the resource that is lacking, here, is access to GP services. Timely diagnostics and treatments were mentioned, but these are often specialist rather than GP services.

Improving people's socio-economic position helps their health but the money wasn't to go to the people, on the face of it. Rather, it was to go to an infrastructure that has explicitly been described as being focusing on collecting data that is cheap and easy to collect. Some of the potential downfalls of this approach were thought to be that the race and socio-economic based funding schemes created additional administrative complexity and costs and leaves a large proportion of differences in spending unexplained. In other words, there is the potential for administrators to make a lot of money off this bounty that has been placed on certain individual's heads. Nobody seems to be expecting them to actually improve health outcomes - the extra money is because of past injustices. They aren't anticipating that these people will present to the clinics they are enrolled in any more frequently than other people do so they won't actually be seeking more GP contact. It sounds like a very attractive patient demographic for administrators seeking good remuneration. There does not appear to be any accountability on how the money is supposed to help the supposed primary beneficiaries. In answer to the question: Who is race based and socio-economically based targeting benefiting?, the primary beneficiaries appear to be administrators. It is true the clinics are gaining more equity in virtue of having these people enrolled in the clinics. This was not what equity in healthcare was supposed to be, however.

Consider the defence of race based funding offerd by Towns, Watkins, Salter, Boyd, and Parkin, 2004, pg., 5). They start with a description of how Māori health outcomes are worse than non-Māori health outcomes, even when we control for poverty. The authors argue that: Together, this evidence provides a compelling argument for specific initiatives focused on improving Māori health outcomes and reducing disparities... current evidence identifies a need for health policies to continue to directly target Māori and further, aim to elucidate the barriers to care that presently exist (Towns, Watkins, Salter, Boyd, and Parkin, 2004, pg., 5).

They then go from the 'epidemiological argument' (that there are differences in outcomes) to the 'legal argument' that the government has a duty to target Māori as an ethnic group because of the Treaty of Waitangi:

The arguments above [about differences in Māori health outcomes even when controlling for poverty] cite epidemiological evidence for targeting Māori as an ethnic group. However, there are other grounds, the most obvious of which is the Treaty of Waitangi... [that] represents the New Zealand Government's contractual obligation to explicitly ensure equitable outcomes for Māori (Towns, Watkins, Salter, Boyd, and Parkin, 2004, pg., 5)

The authors refer specifically to the third article with reference to 'equal rights' for Māori as being a relevant part of the Treaty, but they make no reference to the United Nations or to the Declaration of Human Rights that provides the contractual grounding for the Treaty, as we will see in Chapter 4. Their argument for race based funding is summarised by them:

Underpinning both epidemiological and legal arguments, are ethical principles. The central tenents of medicine (i.e., to reduce suffering, and to improve the quality and length of life) should provide a strong driving force to address these inequalities (Towns, Watkins, Salter, Boyd, and Parkin, 2004, pg., 5). The authors do not consider that the reason why we should help Māori is the same reason that we should help all people who need help: because of Māori being persons, too, with an equal right to health.

We learn that the idea of capitation funding is that District Health Boards and (as an offshoot of that) Primary Health Organisations should receive a funding allocation that is determined not only by how many people there are in the region, but that amount for each person should be weighted according to certain parameters about the person. For example, if the person lives rurally, then the DHB or PHO receives a certain amount extra for that person because of the higher cost involved in rural delivery. Older people and younger people also have higher health needs, and so an extra amount is allocated for the DHB or PHO for having more of these people in their region or enrolled in their practice. Because Māori have worse health outcomes than non Māori District Health Boards gain an extra amount for these people. This is the idea of capitation funding - the idea of funding per person with an adjusted amount on the basis of such factors as their age and ethnicity. The idea was that because health outcomes are worse for Māori (but we have a duty to work to change that because of history / the Treaty) the government should give DHBs and PHOs more money for having Māori people. Presumably, because these extra funds were supposed to be used to achieve better health outcomes for Māori.

It is interesting that one justification for capitation funding (more funds for Māori) is that health insurance companies already make use of such information in calculating risk. The issue here is that making use of such information in calculating risk is something that is placed back on the individual with respect to the premium that the individual is expected to pay in order to purchase their health insurance. Health insurance is supposed to be a way of distributing risk across populations. By paying a smaller amount towards a general pool, there will be enough resources in the general pool for everyone who contributed to it to draw from if they need to claim on the things they have been insured for. The issue is one of calculating how much each individual should contribute to the pool so the distribution of risk across the insured population is fair. One the one hand if my pre-existing risk of developing cardio-vascular disease is twice your risk, then it may seem fair that I contribute more to the pool. On the other hand, I didn't choose my pre-existing risk and charging me more for insuring it seems to be making me pay twice over which seems doubly unfair.

It strikes me as obvious that while there might be associations between factors like race, ethnicity, gender, religion, high medium or low cost of one's first car, secondary school attended, mesh block unit at birth and health outcomes, it would be discriminating against people unfairly to charge them higher premiums because of factors such as these (and indicators thereof e.g., with the first car as a proxy for socio-economic level during childhood because of the association). Charging people higher premiums for their membership in supposed 'equity groups' is a way of discriminating against them in virtue of their equity group status and this is typically considered unlawful because immoral. I simply cannot see how this could be viewed as anything other than discrimination.

While it might be said that people tend to think that it is okay to discriminate against people when it comes to calculation of health insurance premiums because this is a workable system, the fact is that this results in certain groups in our society bearing a disproportionate amount of the burden, or of others exploiting them for their own personal gain. We saw in Chapter 2 we really do not have a workable system. We will return to this (and whether it is necessary) in the next chapter. For now, the role of the government is to legislate against discrimination so that it is not a feature of the private nor public sector, and not appeal to its use in the private sector as precedent for them to employ similar, discriminatory practices. It is important to consider both these practices together (higher insurance premiums and higher capitation funding) before doing an analysis of who the primary beneficiaries of these practices are supposed to be. Is it the equity group members who primarily benefit from both of these practices or do both of these practices share the feature of other people profiting at the disproportionate expense of equity group members? The latter appears to be the case.

In this chapter, I have considered equity groups from the perspective of groups that are biological or social or nominal and ended then considered equity group membership from the perspective of statistics and the idea of using information about equity group membership to calculate (for example) higher health insurance premiums and higher payouts to healthcare providers for having equity group members in their practice. This concludes the descriptive analytic part of the thesis. In the next chapter, we will turn to the 'hairy audacious goal' of the United Nations for peace and security for peoples. Health will be placed in a context alongside other notions such as education and equity more generally. We will consider how the World Health Organisation regards lack of power to be what is in common to equity groups.

# Chapter 4

# From the United Nations to the District Health Board

This chapter will take us top-down from the United Nations to the District Health Boards of New Zealand. I start by introducing an ideology that was articulated in the aftermath of World War II. This ideology was articulated partly in an attempt to prevent the recurrence of atrocities, including the Nazi death camps that resulted in experimentation, forced labour, and extermination of a number of people. People targeted for such treatment included a disproportionate amount of people with disability, Jewish ancestry / faith, and Romany ancestry / Gypsies. These people were targeted for the supposed benefit to the Aryan people, primarily.

While the example of Nazi Germany does stand out as particularly severe or extreme, this is a case where a group of people are expected to bear a disproportionate amount of the burden towards the production of some greater good, for example, the burden of being experimental subjects for the good of medical knowledge. This ideology that a disempowered minority might be expected to bear a disproportionate amount of the burden of the production of some greater good is in large part why countries, including New Zealand, are required to be accountable for statistics that show there to be inequalities between certain groups of people, and to be equitable.

In the last part of this chapter I consider an example provided by the Ministry of Health - immunisation - under the rubric of equity for Māori. The standard story is that Māori traditionally lacked access to immunisations, but they have better access to healthcare (including immunisations) now, so higher rates of immunisation for Māori shows that we are being more equitable. I will point out that irrespective of the actual rates of immunisations the health target 'immunisation' is a measure of compliance whereas the health target 'has made an informed decision about whether or not to immunise' would be a measure of empowerment. I will argue that higher rates of immunisation for Māori compared to non-Māori would actually more likely be a measure of inequity in the sense that Māori would be bearing a disproportionate amount of the burden or cost of the production of herd immunity for New Zealanders.

# 4.1 The United Nations

The United Nations was formed around just after the Second World War. The founding document is the Charter.

### 4.1.1 The charter of the United Nations

The Charter of the United Nations and Statute of the International Court of Justice was signed by a number of countries (including New Zealand) on 26 June 1945. The preamble sets both the context and rationale for the founding of the organisation. The context and rationale is important because it sets the overarching or dominant goal or purpose which all else is supposed to promote or contribute towards: We the peoples of the United Nations determined

- to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and

- to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small and

- to establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and

- to promote social progress and better standards of life in larger freedom,

And for these ends

- to practice tolerance and live together in peace with one another as good neighbours, and

- to unite our strength to maintain international peace and security, and

- to ensure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and

- to employ international machinery for the promotion of the economic and social advancement of all peoples,

Have resolved to combine our efforts to accomplish these aims. Accordingly, our respective Governments, through representatives assembled in the city of San Francisco, who have exhibited their full powers found to be in good and due form, has agreed to the present Charter of the United Nations and do hereby establish an international organization to be known as the United Nations.

At this stage, I want to draw the reader's attention to the first two conditions - to prevent war (promote peace and security) and to reaffirm faith in fundamental human rights. More particularly, to draw the reader's attention to the claim that these are preconditions for treaties to be maintained, and also the notion that treaties are a matter of international (rather than domestic) law. In Chapter 5 we will return to these important ideas when we consider equity for Māori as grounded in the Treaty of Waitangi.

The Charter of the United Nations outlines roles and scope for the Security Council, the Social and Economic Council, and the Trusteeship Council (concerned with the administration and ruling of occupied territories after World War II to help them transition back to the pursuit of economic and social development during a time of peace and security), and describes the International Court of Justice as the principle judicial organ of the United Nations, along with the role of the Secretariat. The Charter describes how the specialised agencies of the UN are supposed to work together to contribute towards the over-arching goal or aim of the United Nations.

Article 57:

The various specialized agencies, established by intergovernmental agreement and having wide international agreement and having wide international responsibilities, as defined in their basic instruments, in economic, social, cultural, educational, health, and related fields, shall be brought into relationship with the United Nations

#### 4.1.2 The Social and Economic Development Council

The Social and Economic Council's purpose and scope is set out in Chapter IX Article 55.

With a view to the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and selfdetermination of peoples, the United Nations shall promote:

a. higher standards of living, full employment, and conditions of economic and social progress and development;

b. solutions of international economic, social, health, and related problems; and international cultural and educational cooperation; and

c. universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion...

This sets an agenda as something for countries to set about doing, rather than setting about (for example) goals of expansionism and conquest and the destruction of some (by way of 'might is right') so that others may profit from taking their possessions.

#### 4.1.3 The Millennium Development Goals

In September 2000, 189 countries signed the Millennium Declaration in which they committed to achieving a set of eight measurable goals by 2015. These are important because they place health in it's messy context alongside other priorities for peoples.

- 1. Eradicate extreme poverty and hunger
- 2. Achieve universal primary education
- 3. Promote gender equality and empower women
- 4. Reduce child mortality
- 5. Improve maternal health
- 6. Combat HIV/AIDS, malaria, and other diseases
- 7. Ensure environmental sustainability
- 8. Develop global partnership for development

The Millennium Development Goals have been the subject of controversy. There has been concern that the Millennium Development Goals have been used as a political football to try and halt or slow the social and economic development of nations such as India, Singapore, and China (for example) while doing nothing to temper the seemingly limitless demands and consumptions of the larger founding nations of the UN (primarily The United States, and England). On the other hand, we considered in Chapter 2 how these nations have been making genuine advances and developing on the world's stage. Let us consider the next turn for development.

#### 4.1.4 The Sustainable Development Goals

On 25 September 2015, the 193 countries of the UN General Assembly adopted the 2030 Development Agenda titled 'Transforming our world: the 2030 Agenda for Sustainable Development' (United Nations, 2015).

This new agenda has 92 paragraphs and paragraph 51 outlines the 17 Sustainable Development Goals (SDG) and the associated 169 targets which are integrated and indivisible (section 18.). Each target has between 1 and 3 indicators used to measure progress towards reaching the targets. In total, there are 304 indicators that will measure compliance. For example, Goal 3 is to ensure healthy lives and promote well-being for all at all ages. While the third goal explicitly mentions health, there is overlap between the goals. For example, Goal 6 is clean water and sanitation to ensure availability and sustainable management of water and sanitation for all. Again, we are seeing messy issues that are of most concern to humanity.

We are setting out together on the path towards sustainable development, devoting ourselves collectively to the pursuit of global development and of "win-win" co-operation which can bring huge gains to all countries and all parts of the world. We reaffirm that every state has, and shall freely exercise, full permanent sovereignty over all its wealth, natural resources and economic activity. We will implement the Agenda for the full benefit of all, for today's generation and for future generations. In doing so, we reaffirm our commitment to international law and emphasise that the Agenda is to be implemented in a manner that is consistent with the rights and obligations of States under international law (section 18).

The Sustainable Development Goals are:

1. End poverty in all its forms everywhere

2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

3. Ensure healthy lives and promote well-being for all at all ages

4. Ensure inclusive and equitable quality education and promote life-long learning opportunities for all

5. Achieve gender equality and empower all women and girls

6. Ensure availability and sustainable management of water and sanitation for all

7. Ensure access to affordable, reliable, sustainable, and modern energy for all

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8. Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all

9. Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation

10. Reduce inequality within and among countries

11. Make cities and human settlements inclusive, safe, resilient and sustainable

12. Ensure sustainable consumption and production patterns

13. Take urgent action to combat climate change and its impacts

14. Conserve and sustainably use the oceans, seas, and marine resources for sustainable development

15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss

16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable and inclusive institutions at all levels

17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.

The Sustainable Development Goals are clearly a development or extension of the Millennium Development Goals insofar as what was formerly list of 8 things has now blossomed or swollen into a list of 17. It isn't the case that there is a straightforward mapping between Goals in the sense of simply breaking them down into components and articulating each part in more detail, however. Rather, sometimes fewer words have been used for greater, or more sweeping effect.

For example, while Millennium Development Goal 2 focused on 'universal primary education' the Sustainable Development Goal 4 is to 'Ensure inclusive and equitable quality education and promote life-long learning opportunities for all'. While previously the policy appeared limited to only Primary educational providers, it is now clear that the policy encompasses Secondary and Tertiary educational providers. Goal 16 makes it very clear that tertiary education providers can no longer claim to be exempt. With respect to Health, while the Millennium Development Goals explicitly mentioned child mortality, maternal health, HIV / AIDS and malaria as goals 4, 5, and 6; the Sustainable Development Goal 3 is to 'Ensure healthy lives and promote well-being for all at all ages'. While previously it appeared the UN was focused on the activities of agencies in developing, or third world nations (with high rates of infant mortality and communicable disease), it seems clear that the focus is now on the rather harder to measure or quantify issues of 'healthy lives' and 'well-being'.

The 2030 Agenda for Sustainable Development declaration grants people freedom without distinction on the basis of race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth, disability or other status (article 19). Article 23 states that:

People who are vulnerable must be empowered. Those whose needs are reflected in the Agenda include all children, youth, persons with disabilities (of whom more than 80 per cent live in poverty), people living with HIV/AIDS, older persons, indigenous peoples, refugees and internally displaced persons and migrants. We resolve to take further effective measures and actions, in conformity with international law, to remove obstacles and constraints...

We see again, the theme of empowerment.

#### 4.1.5 The United Nations Declaration on Human Rights

Let us now turn, very briefly, to introducing the idea of human rights. The notion of human rights has received a lot of criticism. One might say that the notion of rights is a lofty ideal that is unattainable in practice. For example, one view is that in order for a small minority to have any kind of quality of life that makes their lives worth living (from their own perspective) is for a majority to not have human rights. Alternatively, the idea might be that insofar as some group of people have human rights, their rights are required to be persistently violated or over-ridden so that some minority of people can retain what it is that they have. One might characterise this perspective as the sadist's view and dismiss it because the sadist's preference for sadism doesn't count. This would be too hasty, however.

One critique of some versions of something along the lines of the American Dream was that the realities of it required many others to live in appalling conditions, both behind the scenes in America and working in sweat shops in foreign lands to produce the goods to support the consumerism. In order for this view to have any kind of credibility as a theory that is not itself unethical or immoral it requires a certain amount of buy-in. It might be considered fair for some people to take what they can get for as long as they can get it because they can get it and not be affected by others being sore losers for not ending up with much in life But this would be so only if it really were the case that those who don't end up with much in life are playing the same game that they are. They would treat others similarly, if they had been lucky enough to have seen opportunity to have taken things and if they had have had the ability to step up to the plate when it came to that. The above game isn't typically regarded a particularly moral, or co-operative life strategy, however. Rather, it has been difficult for theorists to explain how it is that moral behaviour and co-operation could have persisted in the face of other people's or groups or widespread failure to co-operate.

## 4.2 The World Health Organisation

The World Health Organisation (WHO) is a specialised agency of the United Nations that is concerned with international public health. The World Health Organisation was established on April 7, 1948 and it's constitution was signed by 61 countries in 1946. It has played a leading role in the eradication of small-pox and current priorities include communicable diseases, e.g., HIV/AIDS, malaria, and tuberculosis. The World Health Organisation Constitution was adopted by the International Health Conference held in New York from 19 June to 22 July 1946. There are 9 constitutional principles, though it is common to focus on the first two:

1. 'Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity (WHO, 1946; WHO, 2006)'. 2. 'The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition (WHO, 2006)'.

At this point, the sceptic might think that the World Health Organisation has defined health in such a way that it is an unattainably high, impossible ideal that does not and cannot have any real, practical, import. As such, it doesn't make much sense for the World Health Organisation to regard health to be a fundamental human right. Or, alternatively, if this impossibly high ideal of health is a fundamental human right, then rights must be fairly vacuous sorts of things to have. This would be because the attainment or instantiation of states of affairs or circumstances satisfying them would seem to be simply not possible for many people, for much of the time.

In the second clause, the World Health Organisation talks about the highest 'attainable' standard of health. This may provide some resources for a reply to the sceptic. One might say that while not all people are able to achieve a state of complete well-being, all people have the right to achieve the highest state of well-being that is attainable, by them. Later in the document, Article 1 states that 'The Objective of the World Health Organization... shall be the attainment by all peoples of the highest possible level of health (WHO, 2006)'.

The idea seems to be that while people with certain kinds of disability might be thought to not be able to attain health, in the sense that despite our very best efforts, limbs do not simply grow back and thus someone who is born with a congenital absence of a limb might be thought not to be able to attain health in the World Health Organisation's sense. There are two different responses we could make to this. Firstly, the loss of a limb might be a difference rather than a disability and as such there is nothing to prevent a person without a limb (without perfect mobility - whatever that means) being in perfect health. Secondly, while a person might have a particular health issue (loss of a limb, astigmatism, short sightedness), health might be more or less attainable insofar as treatments are attainable. This is either because of technological limitations (limbs don't grow back) or financial limitations (not all prostheses grow on trees).

I don't know that what I have said in the last two paragraphs provides an entirely satisfactory response to the sceptic. Later, we will see inequitable ill-heath as a condition arising from lack of resources needed to attain good health, however. Perhaps this contrast class helps the understanding. My focus is mostly on the latter.

The second principle expressed by the WHO introduces the idea of groups of people. Here, the relevant groups are explicitly enumerated as race, religion, political belief, economic or social condition. While every person has rights, whether a person's right has been violated seems to be something that the World Health Organisation considers tied to their status as a member of a particular group. 3. The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest co-operation of individuals and States.

4. The achievement of any State in the promotion and protection of health is of value to all.

5. Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger.

The World Health Organisation links health to peace and security and explicitly mentions co-operation. Health isn't regarded as a finite resource where people or organisations compete to have some at the expense of others needing to miss out. Some people attaining health doesn't make the world worse for others. Ill health poses dangers for us all (e.g., communicable disease).

Again, the sceptic might think that the World Health Organisation has an unrealistic view of health. The sceptic might think that the resources needed to attain health are finite such that it simply isn't the case that all people can attain the resources they need to attain health. The sceptic might think that the health of some is somehow intrinsically tied to the ill-health of others. For example, when students are learning they need to practice on people and when they are practicing, or learning, they are likely to make mistakes. When people are learning they learn not in private practice but in the public health system and thus the high users of our public health system are the ones who have to bear the majority of the cost of their learning.

In other words, the sceptic thinks that perhaps, in order for some small minority of people to have competent, private, healthcare, there is required to be a larger majority who don't have access to competent, private, healthcare, but rather, are required to present to public systems in order for the health workforce to have plenty of patients such that it is possible for students to attain competence which is required for a small proportion of the people to have competent practitioners. I will return to the issue of the distribution of costs and the sustainability of enterprises that unfairly distribute costs / benefits in the final chapter.

6. Healthy development of the child is of basic importance; the ability to live harmoniously in a changing total environment is essential to such development.

7. The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health.

8. Informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people.

9. Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures.

Points 7 and 8 relate to informed opinion and consent. This will be contrasted with compliance later in the chapter.

#### 4.2.1 Disability

The WHO Global disability action plan 2014-2021 better health for all people with disability, (2015, pg., 1) states that:

Disability is universal. Everybody is likely to experience disability directly or to have a family member who experiences difficulties in functioning at some point in his or her life, particularly when they grow older. Following the International Classification of Functioning, Disability and Health and its derivative version for children and youth, this action plan uses 'disability' as an umbrella term for impairments, activity limitations and participation restrictions, denoting the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual (environmental and personal) factors. Disability is neither simply a biological nor a social phenomenon.

The World Health Organisation does not characterise disability as something that happens to 'other' people; rather, they focus on the universality of our experience of it - as something that happens to our self, or will likely happen to our self, and also to the people around us. They mention both biological and social aspects of disability, but, notably, do not mention economic. They go on to consider some of the factors associated with disability.

Disability is a global public health issue because people with disability, throughout the life course, face widespread barriers in accessing health and related services, such as rehabilitation, and have worse health outcomes than people without disability. Some health conditions may also be a risk factor for other health problems, which are often poorly managed, such as a higher incidence of obesity in people with Down syndrome and higher prevalence of diabetes or bowel cancer in people with schizophrenia (World Health Organisation, 2015, pg., 1)

They go on to characterise associated human rights violations and, lastly, the association with poverty, lack of education, and lack of employment:

Disability is also a human rights issue because adults, adolescents and children with disability experience stigmatization, discrimination and inequalities; they are subject to multiple violations of their rights including their dignity, for instance through acts of violence, abuse, prejudice and disrespect because of their disability, and they are denied autonomy. Disability is a development priority because of its higher prevalence in lower-income countries and because disability and poverty reinforce and perpetuate one another. Poverty increases the likelihood of impairments through malnutrition, poor health care, and dangerous living, working, and travelling conditions. Disability may lead to a lower standard of living and poverty through lack of access to education and employment, and through increased expenditure related to disability (World Health Organisation, 2015, pg., 1).

It is important to focus on the idea that having a health condition is a distinct issue from having a disability. In order for there to be disability there needs to be 'impairments, activity limitations and participation restrictions, denoting the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual (environmental and personal) factors'. In other words, not all people with health conditions are disabled by their conditions - and their society's response to their condition and / or their person. Disability is not an inevitable by-product or result of having a condition.

On the other hand, the World Health Organistion may be attempting not to *describe* disability, but to *predict* how it is that those who are diagnosed with disability will be treated.

#### 4.2.2 Equity

The World Health Organisation (WHO, n.d) considers equity (or inequity) as a health system topic. There are three paragraphs in all that are often cited in a summarised or condensed version but I am loathe to do this because their position is complicated and summarising or condensing is likely to leave out something important and end up being an inaccurate minimal paraphrase. More particularly, I will claim that the New Zealand Ministry of Health seems to have missed the part about empowerment, so it is important I reproduce the passages in their entirety, here.

The below paragraph can be broken down into 4 points that I have superscripted:

Equity is the absence of avoidable or remediable differences<sup>1</sup> among groups of people, whether those groups are defined socially, economically, demographically, or geographically<sup>2</sup>. Health inequities therefore involve more than inequality with respect to health determinants, access to the resources needed to improve and maintain health or health outcomes<sup>3</sup>. They also entail a failure to avoid or overcome inequalities that infringe on fairness and human rights norms<sup>4</sup>.

Firstly, in order for there to be an inequity there needs to be a difference between groups of people. Not just any kind of difference will do. This difference must be avoidable and remediable. Secondly, there don't appear to be restrictions on the way groups are defined. They don't have to be biological, for example. This fits with a more specific statement to come later about what is common to equity groups (to do with lack of power). Thirdly, the differences (inequalities) that are relevant for health in particular are differences with respect to either: A) health determinants and / or, B) access to resources needed to improve or maintain health and / or, C) access to resources needed to improve and maintain health outcomes. In the next chapter in the section on statistical parameters I will provide a list that has been offered of these things so we can better understand the vast range of data that is thought to be relevant for the purposes of tracking health equity. Fourthly, the existence of avoidable and remediable difference (difference that has not been successfully avoided or overcome by the group) in factors A and / or B and / or C entails an infringement on fairness and human rights norms. The idea here is that it is conceptual that certain kinds of inequality are inequitable.

Paragraph Two:

Reducing health inequities is important because health is a fundamental human right and its progressive realization will eliminate inequalities that result from differences in health status (such as disease or disability) in the opportunity to enjoy life and pursue one's life plans.

The third paragraph:

A characteristic common to groups that experience health inequities – such as poor or marginalized persons, racial and ethnic minorities, and women—is lack of political, social or economic power. Thus, to be effective and sustainable, interventions that aim to redress inequities must typically go beyond remedying a particular health inequality and also help empower the group in question through systemic changes, such as law reform or changes in economic or social relationships..

This idea of empowerment is an important one and I will have more to say about it in the next section when I consider how the Ministry of Health considers equity, in New Zealand. Empowerment will also be the subject of the final chapter of this thesis.

### 4.3 The New Zealand Ministry of Health

The New Zealand Ministry of Health position statement on equity (2015) locates it within the following website directory structure: Home > Our work > Populations > Māori health > He Korowai Oranga > The key threads > Equity. While this might seem innocuous enough, it is dismissive of other equity groups as it does not acknowledge that equity is in fact a concern for a number of population groups in New Zealand other than Māori.

The Ministry of Health entry on equity states that:

The World Health Organisation defines equity as the absence of avoidable or remediable differences among groups of people. The concept acknowledges that not only are differences in health status unfair and unjust, but they are the result of differential access to the resources necessary for people to lead healthy lives.

This does seem to be an accurate restatement of the first part of the World Health Organisation's view. The Ministry of Health continues:

Progress in health equity. Some gains have been made towards health equity (for example, immunisation rates for Māori children have improved so much they are now equal to or better than non-Māori rates in much of the country.) However, more work needs to be done to achieve health equity for Māori and for all New Zealanders.

While the entry makes a very specific empirical claim about rates of immunisation I want to put the empirical issue of actual rates of immunisation off to one side and focus on the ideology that is being presented here with respect

to what progress in health equity would look like. In other words, whether or not it is true that immunisation rates for Māori are increasing and whether or not it is true that immunisation rates for Māori children are better than non-Māori rates is not relevant to what I have to say. Instead of being concerned with empirical details around actual rates, I am concerned with the ideology that it would be more equitable for  $M\bar{a}ori$  if it were the case that immunisation rates were increasing and / or were higher. In this case, 'better' seems to be equated with 'higher'. The idea of 'better' is important. Often, in the literature, there appears to be confusion or ambivalence when it comes to valence. Sometimes valence is included (e.g., in a causal chain like: Low levels of education > low levels of employment) whereas other times valence is mixed (e.g., in a causal chain like: Low levels of education > employment). One might think this innocuous enough - but this tendency to mix things up highlights that the information provided can be used to effect very different things for different groups of people. In response to this, we are agreed: We are trying to effect equity. But now we need to ask 'equity for who?' We are presented with two options: Equity for Māori, and equity for New Zealanders.

In Chapter 2 we considered three broadly different notions of equity. Firstly, the idea of fair distribution. Secondly, the idea of an amount overall (e.g., an increase in gross domestic product). Thirdly, the idea of inheritance - or keeping it in the family (e.g., equity trusts). People can agree they are trying to further the aims of equity while they are pursuing any of the above notions. This can be the case both for Māori and for non-Māori. Let us now consider how these notions of equity play out when it comes to immunisation.

Firstly, let us ask the question: Who is the primary beneficiary of higher rates of immunisation? The story we are typically not told is that the primary beneficiaries of immunisation are the free-riders who are not themselves immunised, but who benefit from a certain percentage of the people around them being immunised. Here, free-rider is a technical term in economics that refers to the people who share in the benefits without sharing in the costs of the production of benefits. This is because there are costs to having an immunisation. There is always some risk associated with any medical procedure. A needle stick provides a route of entry for pathogens which might go on to infect or cause medical problems for the recipient. The foreign material present in the immunisation might cause an immune reaction that becomes excessive or extreme or targets healthy tissue of the recipient's body. Live vaccines might go on to cause the disease they are supposed to be immunising against. The likelihood that the particular individual who is the recipient of the vaccine would actually catch the disease in the wild that they are being immunised against (if they were not to be immunised) is typically very low. It is also the case that typically many orders of magnitude more people don't get the disease than people who do (with or without herd immunity). The harms of the disease the recipient is being immunised against are also typically very low, even if they were to catch the disease. Measles, for example, doesn't cause too many problems for healthy, robust individuals with good immune systems who are more likely to experience it as not laboratory diagnosed cold or flu.

While measles can be deadly in those who are immuno-compromised, it typically isn't the case that immuno-compromised individuals are recipients of vaccines. Again, the story we are typically not told is that the primary beneficiaries of vaccination are the individuals who are not themselves immunised and who are benefiting from herd immunity. The story we are typically not told is also that those who benefit the most are those who are immunocompromised who are likely to suffer greatly if they become infected. Immunocompromisation can be due to many things., particularly, due to immunosuppressant therapy to assist with cancer treatment, or in individuals who are HIV positive (for example) but are functioning well due to their access to antivirals. Unless Māori are over-represented in these populations it seems hard, indeed, to understand the claim that higher rates of immunisation in Māori are something that primarily benefits Māori even though we can understand that they have been the target for intervention (higher rates of immunisation for Māori).

Smallpox only required around 50 per cent of the people to be immunised to result in sufficient herd immunity to protect the population and that is why smallpox vaccination programs were so effective. It has been estimated that immunisation rates sufficient to provide herd immunity to measles (given current sorts of standards on housing and overcrowded living conditions) is around 94-97 per cent, however (Hawe, 1994, in Baum, 2015, pg., 492). This is what has made it so hard to eradicate measles (in current housing conditions) with vaccination programs.

The standard story on lower rates of immunisation for Māori historically is typically told as one of lack of access to immunisations. Historically, Māori didn't have access to the doctors or the allied health professionals who, in turn, had access to the immunisations that would help their people. The primary beneficiary, here, is typically cast as being not the broader non-Māori (eg., tourist) society, but rather Māori, themselves, in the name of equity. It is supposedly because of this historic lack of access to immunisations that makes it the case that Māori having higher rates of immunisation now would be a situation that is *better - for Māori*.

We need to distinguish as being better for Māori, or *better for society overall* (at the disproportionate expense of Māori). Immunisation strikes me as being a case that is better for the world overall when rates are 95 per cent - but finding that a group of people have disproportionately higher rates of immunisation is finding a world where that group of people are bearing a disproportionate amount of the burden or cost that is incurred in the pursuit of that greater good. It is *not* a case where the primary beneficiary is the named equity group.

It is important for me to be very clear that I am not advocating that Māori not have their children immunised (in the name of equity). I think it is important to be clear on why it is good to be immunised - for the right reasons, however. I will have more to say about right reasons in Chapter 5 when I consider Kant's notion of acting from rather than merely in accordance with reasons. It is important to be clear about immunisation in the context of informed consent rather than locating it within a more military-style of public health as a matter of developing world compliance with developed world agenda (or similar). The reason I am wanting to consider this is because I am concerned about the distribution of costs and the issue of whether our most disadvantaged and vulnerable people are being targeted and expected to bear a disproportionate amount of the burden of the production of herd immunity - in the name of equity, no less.

When the issue is cast (as it typically is) as one of *access* to medical treatment - I still have trouble understanding how Māori are supposed to be the primary beneficiaries. The issue is not one of immunising more Māori kids. The issue (especially with regards to empowerment) is one of more Māori being offered immunisations. This is the crucial last part of the World Health Organisation view that our Ministry of Health leaves out - the idea of *empowering* equity groups. For example, *empowering* Māori to make informed decisions about whether they want to participate in immunisation programs, or not. Statistics aren't being kept on how many people have made an informed consent decision about whether their child will be immunised or not, however. Rather, the statistic that is regarded to be relevant (in the name of equity) is one of actual rates of immunisation. These numbers will be different insofar as there may be people who make informed decisions not to immunise their kids, or as people may be forced or coerced to immunise their kids (e.g., by withholding CentreLink payments if they do not immunise their kids). Note that it is not government employees like Members of Parliament or Vice-Chancellors of Universities whose payments will be withheld if these people choose not to immunise their kids. The measure does not seem to be one of empowerment, in other words, the measurement appears to be one of compliance, and not so much for their own good but at their expense. To be fair to the Ministry of Health, it is the World Health Organisation that requests information on rates of immunisation (rather than rates of informed consenting decisions - either way). It is the job of the Ministry of Health to look after the interests of its people. If the Government will not look after its own people, it is hard to know how to do business with them.

Baum (2015, pg., 492) states that with respect to Australian Populations: 'The AIHW (2012) reported that there are only very small differences in rates of immunisation between advantaged and disadvantaged and Indigenous and non-Indigenous Australians'. Whether there are good reasons to believe the AIHW statistics, or not, Baum thought it was worth stating this. It does seem to matter how the burden of immunisation is distributed. It seems strange that they found only small differences since they also say that 'From 2012 parents had to have their child vaccinated in order to receive family benefits payments (Baum, 2015, pg., 492) which seems like they, too, are targeting a certain group of people for higher rates of immunisation (probably, again, in the name of equity or accessibility or similar). We might well worry whether the poor and the indigenous are being targeted to bear a disproportionate amount of the burden of the production of herd immunity, especially if they are never likely to be the recipients of immuno-suppressant therapy (e.g., following cancer treatment they will never have, transplant they will never have, HIV medications they will never have) which would allow them to survive in an immunologically compromised state, and the like, where these people (and not the healthy wealthy) were (at least nominally) supposed to be the primary beneficiaries.

To be clear; I am not advocating that people not be immunised. A world in which we have herd immunity is a better world than a world in which we don't. But (and this is crucial) a world in which *no group disproportionately bears the cost of the production of that world* is best. We need to work towards the development and protection of an infrastructure such that 95 per cent of people in the world provide an informed consent decision that results in the creation of that world, secure in the knowledge that they and their people are not being asked (or conned) into shouldering a disproportionate amount of the cost or burden of its production. It is the knowledge that they are not being asked (or conned) into that that will result in informed consent being given. Otherwise: Nobody in their right mind would consent to that. Send in the military. That's not sustainable. I will explain this further in Chapter 5. A concern is that we are currently in something of this position. This thesis is on how we can see medicine develop so that more people have access to medicine rather than more people having access to their person in the name of medicine and medical treatments.

Medicine (or in the name of medicine) has historically a very bad track record when it comes to intentionally infecting people with various things (or of knowing they have been infected and allowing / persuading them to believe otherwise) when there appears to be the possibility of tracking those subjects over time by way of (for example) electronic record and seeing the effects of what was done to them. The Cartwright Inquiry shows that New Zealand is no stranger to observational studies that are of dubious benefits to those who are the subject of observation. The temptation to experiment with different batches of immunisations in a way that disproportionately distributes the risk would be great - if people thought they could get away with it. We will consider the prevalence of this life strategy in Chapter 5. I say this not to try and scare people away from being immunised (or away from being immunised at clinics targeting, for example, Māori and poor people), but more to try and demand that we develop better systems of accountability so that we can ensure such things do not happen, so that in turn people might give informed consent on the issue of immunisation and of other medical treatments and procedures, as well.

The Tuskegee study shows us that historically black colleges don't necessarily make medicine more accessible to blacks even when offered in the name of free or cheap healthcare and people have reason to be wary of segregation and segregated services. We have already considered segregated health services in the name of equity more under capitation funding in Chapter 3. We need to get more serious about equitable (fair) distribution of equity (as an overall amount) and mixed demographic clinics or we are likely to end up in the position where there is a crisis of faith in the people, possible civil war, and dissolution of Medicine and Medical Institution. This might sound extreme, but we have already seen that inequality has been considered the biggest threat to peace and security and economic development of nations by the United Nations. It may sound as though I am being very opinionated (if the reader has a different opinion) but I hope I have provided enough (sometimes somewhat lengthy) quotations to convey that I am not the only person saying such things and the higher one goes in organisational structure the greater the awareness seems to be.

One of the rationales for the founding of The United Nations was the desirability of peace and security and we need to understand the idea of trade as being something that is mutually beneficial rather than as something intrinsically or necessarily exploitative where the aim is to take what one can get at the expense of the other if one can, as we will see in Chapter 5.

# 4.4 District Health Boards and Primary Health Targets

New Zealand has 20 district health boards, with 11 members on each board (for a total of 220 board members). In the document *Building a Healthy New Zealand: Becoming a DHB board member* the Ministry of Health (2013) outlines something of the purpose and scope of the District Health Boards of New Zealand in order to inform prospective applicants. The boards have a:

combined budget of over \$11 billion, representing 75 per cent of the government's total health budget... Their basic function is to plan, manage, provide and purchase health services for their communities so that New Zealanders have access to quality services when and where they need them. DHBs own and run our public hospitals, but their reach extends even further. GP visits, disability services, pharmacy prescriptions, laboratory tests and mental health and addiction services all come under the DHBs' jurisdiction. DHBs also fund community and residential care and deliver health promotion programmes to improve the overall wellbeing of the communities they serve (Ministry of Health, 2013).

They go on to describe how the performance of DHBs is assessed:

DHBs are required to deliver on specific health targets set each year by the government. The current health targets are: shorter stays in emergency departments; shorter waits for cancer treatment; improved access to elective surgery; increased immunisation; better help for smokers to quit; more heart and diabetes checks (Ministry of Health, 2013).

Jackie Cummings described New Zealand's health system as part of a global series about health systems in *The Conversation* in an article entitled: *New Zealand's health service performs well, but inequities remain high.* The role of the District Health Boards is to:

[D]irectly deliver hospital and hospital-led community services (such as district nursing services), and contract for primary health care services through 36 Primary Health Organisations (PHOs). These in turn contract with general practices or health care homes to deliver primary health care. DHBs also hold contracts with a range of other primary health care providers, such as pharmacists and laboratories, and with many private for-profit and private not-for-profit organisations delivering community care (for example, services for mental health and home-based care for older people) (Cummings, 2017).

The above quotation describes the flow of money from the Government to the District Health Boards who distribute money to maintain and develop public infrastructure and services, and also to contract out to private providers of healthcare services. Cummings describes the public health system focus:

In recent years, the New Zealand government has focused on a range of performance targets that it monitors. For the healthrelated "better public services" targets, New Zealand has seen increases in the rate of child immunisations, but not all DHBs and PHOs are hitting the target of 95% of eight-month-old babies being fully immunised. Other trends show that most DHBs are meeting targets for increasing the number of elective operations and for ensuring that 95% of people are seen in an emergency department within six hours. Performance against the target for smokers to be offered assistance is also good, though a bit variable across DHBs and PHOs. The targets for raising healthy kids (where 95% of obese children identified in the Before School Check programme should be offered a clinical assessment and family-based interventions) and for cancer treatment (to begin within 62 days for 85% of people) require more work in many DHBs... The strain on services is appearing in media reports, highlighting poor performance in

mental health (including high rates of suicide, especially amongst young people and Māori) (Cummings, 2017).

With respect to our funding model:

New Zealand generally spends less per capita on health care than other countries... Increasing concerns are being expressed over problems people have in getting to maternity, oral health, cancer and elective services. This is likely to be leading New Zealanders to purchase private health insurance in increasing numbers, which raises concerns over ensuring there is equity of access within the health service, as those on higher incomes are more likely to buy insurance (Cummings, 2017).

In 2018, and in every year, the District Health Boards are required to provide statistics on certain health targets that are set by the Ministry of Health as are the Primary Health Organisations. This aspect of the service appears focused on getting the people to comply with the targets that the Ministry of Health has set rather than getting the service to be responsive to the people who present for the services. We have seen previously that many people in New Zealand don't earn enough to be able to purchase private health insurance or to make co-payments on health care. Pre-existing conditions are typically not covered by health insurance, so there is no health insurance to cover people who have been diagnosed with disability early on.

With respect to the distinction between health and health outcomes or health and health targets we need to consider that health is not measurable by quantitative analysis and this is why it is tempting to focus on measuring and reporting proxy measures (objective, quantitative health outcomes) or focus on pursuing proxy goals (health targets). Just because health is not amenable to quantitative analysis does not mean it is of no value, however. Rather, it means it is of immeasurable value. It is important to remember that not everything worth measuring can be measured, and a great many things that are highly measurable really are not worth measuring, at all.

The World Health Organisation appeals to what is apparent, or visible. I have seen many people try and articulate this elusive notion and I haven't seen much of an articulation that didn't raise at least as many problems or issues as it purported to help solve. I don't have a better analysis myself. This notion that can be conveyed or gestured towards requires some kind of common-sense or willingness to try and apprehend it. Much of the literature is on critiquing positive accounts that have been offered. I do not think that this literature will help us get further ahead, however.

To convey something of the problem people can typically tell whether a plant is healthy (flourishing, thriving, doing okay) or whether it looks sickly. We can typically tell whether an animal is healthy (flourishing, thriving, doing okay) or whether it looks distressed, agitated, or sickly. We can typically tell whether people are doing okay, or whether they are distressed, unhappy, and sickly in demeanour. These qualities are hard to quantify. Much of the food industry is attempting to maximise profits by having people select fruit and vegetables and meat and dairy that is cheap to produce at great volume that *appears* healthy rather than selecting produce that is healthy (e.g., by treating 'fresh' produce with preservatives and waxes and the like to make it appear shiny / healthy without much concern on the healthfulness of eating waxes).

Artificial selection and modification have intentionally obscured things as fruits are selectively bred for higher sugar contents and lower levels of phytochemicals and antioxidants because the former just taste tastier and will tend to be consumed at higher volume (e.g., sweet apples vs tart apples). It is important to remember that health outcomes have been introduced as a proxy measure for health, however, and not to confuse the health outcomes with the overall goal. We have learned something of the danger of nitrogen content as a proxy for protein content as a proxy for nutritional value of milk powder. We have learned that shininess can be feigned and not a reliable indicator of the health of an apple. It is important not to end up pursuing some proxy measure because it is easier and cheaper to do so. Most especially not to do this at the overall expense of or to the detriment of the elusive notion of health that was the initial motivator or driver behind the whole thing.

For example, let us consider '95 per cent of people will not remain in the Emergency Department for more than 6 hours' as a health outcome. If this health outcome is the goal, then a District Health Board can report whether the goal has been attained or not and also report how far off the attainment of the goal they were if they were unable to achieve 95 per cent. If this health outcome is a proxy for health, however, then we might consider that there are ways of achieving the proxy that are likely to result in an increase in health and there are ways of achieving the proxy that are unlikely to result in an increase in health. For example, consider the following ways of achieving the proxy, while likely not achieving an increase in health:

- Position security guards outside the front of the ER and turn away the majority of people who show up.

- Have receptionists turn away people who show up – telling them they should follow up with their GP the next day.

- Have St John's or the Wellington Free Ambulance service redirect the majority of people to after hours GP clinics, rather than to the Emergency Department of the hospital.

- Have nurses or other staff tell people who have been waiting for more than 5 hours to go home and follow up with their GP the next day.

- Have people transferred into a different section of the hospital that is 'strictly speaking' not considered part of the Emergency Department once they have been waiting for more than 5 hours. While these will individually or together combine to produce the desired health outcome they seem to miss the point when it comes to the health outcome only being of value to us because of its presumed relation to health. It would be worth considering how or why this outcome is considered to have relation to health. This needs to be made explicit before we can see whether we should care about the proxy goal. More importantly we can ask: Who profits from the above ways of achieving the proxy goal? Who are the primary beneficiaries? That may be unclear. It seems these ways of achieving those targets are primarily concerned with keeping costs down which would free up funds for alternative avenues / areas of healthcare. Perhaps to fund the next pay increase for administration or management.

To summarise the picture thus far, in this chapter, I have introduced the United Nations and World Health Organisation view of health as something of an aspirational ideology. I have then considered the Ministry of Health and District Health Boards of New Zealand who have adopted proxy goals or targets so as to more easily track finances and health outcomes. I have considered two case studies: Immunisations and reduction of Emergency Room wait times to illustrate that it can be far from clear how these proxy goals or targets relate back to the ideology or work towards the achievement or realisation of the UN and WHO view of health.

# Chapter 5

# Equity targets and empowerment

## 5.1 Distribution of benefit

One way of introducing undergraduates to ethics is to introduce them to a thought experiment derived from the Ring of Gyges outlined in book two of Plato's *Republic* (in Allen (trans.), 2006). There is a magical ring of invisibility and students are asked to imagine all the different kinds of mischief they could get up to by employing it in a time before DNA testing and other more modern methods of criminal detection. Students are also asked to imagine that the Ring grants invisibility from God so that God will not punish them for their actions in this life or in the afterlife. Students are given time to consider the sorts of things they could do with the Ring. We can then ask students to honestly reflect upon that and tell the class: Who would think that they would employ the Ring to do things that they, themselves, believe to be wrong? It is one way of asking people whether they think there is any reason for them to behave morally - if they can get away with immorality without fear of detection and punishment in this life or the next.

I haven't done an extensive survey. It is also possible students will say one thing and do another in the spirit of arguing for arguings sake or an attempt to strengthen their intellect by defending what they believe to be indefensible, in all my ethics classes the class has been divided around the middle on this. Or, if the class has not been divided around the middle then those who said they would behave morally found themselves in the smaller minority. If we assume that people are basically being honest, then it perhaps isn't so surprising if we consider evidence on how people behave in such experiments as the Stanford Prison Experiment (1971), The Milgram Experiment (1963), The Third Wave Experiment (1967). Most people seem to behave in a socially or environmentally driven way rather than from internal features of their character or from a sense of morality (see, for example, Doris, 2005). It seems that most people will do things they, themselves, believe to be wrong if they think they can get away with it / if they think their behavior is socially expected or sanctioned.

Some students say that they would not use the Ring to do things they believe to be wrong because of something along the lines of conscience or having to live with knowledge of what they, themselves had done. Other students say they do not feel motivated by something along the lines of inner conscience. Instead, they likely would use the Ring to profit themselves at other's expense if they thought that others would not come to learn this about them and / or not be in the position to punish them for particular things they had done. People differ with respect to where (if anywhere) they would draw the line on this (e.g., saying that stealing is okay but not rape).

Both of the above lines of reasoning are similarly self-interested. It is just that conscience features into only some people's moral calculus. We might then consider the source of conscience, however, whether it is somewhat reflexively driven from conditioning moral emotions such as guilt or shame or disgust, or whether it is derived from a more rational process of deliberation on issues of fairness and the like. Kant (1785, in Ellington (trans), 1993) draws a distinction between acting merely *in accordance with* morality and acting *from* morality. The idea, here, is that some people may behave morally by luck or by accident or by conditioning, but their behavior is to be distinguished from the behavior of a person who does the right thing *from a sense of morality* or *because it is the right thing to do*.

Kant thought that the source of morality was in reason. It was in apprehension of the categorical imperative that one should act according to a moral rule or law that one could will to be universal. One way of expressing this is something along the lines of 'doing unto others what one would have them do unto you'. Or, as Kant put it 'act as if the maxims [guiding principles or rules] of your actions were to become through your will a universal law of nature'. There is a symmetry or equality or consistency or one mindedness here of a single very abstract universally willed / willable moral principle that all rational agents would converge on after appropriate deliberation. What then do we say of the fact that people do not converge on a single abstract universally willed moral principle? One could say that they are not rational. There has been much debate over this and over whether it is rightly or properly understood as a matter of rationality.

In economics, the idea of rationality is typically one that appears very different from Kant. Adam Smith is sometimes credited as the father of modern economics or the father of modern capitalist economics. The idea seems to be that the rational position is when each agent competes with each other agent in order to pursue their own ends or their own self-interest narrowly conceived. With respect to the good of the aggregate Smith thinks this will simply take care of itself:

As every individual, therefore, endeavours as much as he can both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value; every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good. It is an affectation, indeed, not very common among merchants, and very few words need be employed in dissuading them from it (Smith, 1976 in Cambell and Skinner (eds.)).

One way of reading the above quotation is that it is a call for individuals to be free to pursue their own self-selected ends with respect to what they contribute to the market and with respect to what they purchase from the market. This can be contrasted with a situation where there is some centralised authority that allocates different jobs to different people and centralises purchasing decisions. Another way of reading the above quotation has been the stronger reading whereby people should pursue their own interests narrowly conceived because this will aggregate into what is best for the group. Smith would deny much of what we saw about the realities of inequality resulting from government legislation in Chapter 2.

In Chapter 3, we considered the United Nations view of human rights and, more particularly, of the human right to health. At the time I raised some objections in the voice of the sceptic to the view of the United Nations. The objections were mostly that while it was a nice ideal in theory, it was something far removed from realities of life. People seem to have been encultured to believe that something along the lines of the UNs view is childish and overly naive whereas the real situation is more like a struggle between different groups, or factions, and to that end people make bargains and deals that are kept only when it is expedient for them to do so. These is sometimes discussed as being 'morally grey' in the sense that there isn't a clear division between 'good guys' and 'bad guys' (TheGenieofLife, 2016; Messner, S, 2018).

The idea of moral greyness is the idea that conflicts arise because people or groups of people have different ends. People make pacts or bargains or trades that are in their interest and sometimes they happen to be of mutual interest. People only keep their word when it is expedient for them to do so, however. One view of what is happening here is that people are not behaving morally or with integrity at all insofar as they keep their promises and do what they said they would only when it is expedient for them to do so. Another view is that this is not an immoral position insofar as everyone is playing the same game, however.

What seems to be thought to justify this as a *moral* position (and not merely the lack of morality or lack of conscience) is the notion that everybody is playing the same game. It was common in class for students who said they would use the Ring for nefarious ends to publically say that they thought the students who said they wouldn't were lying. They would say things like 'power corrupts' or try and tempt the students who said they wouldn't use it for ill with things they might really be motivated to do. They would say that everyone is playing the same game of looking out for themselves first, primarily, and they would be passing up an opportunity or being foolish for not making the most of the opportunity presented to them with the Ring.

On this view of life, we are in a situation where you should aim to take what you can for you and yours for as long as you can because you can. This view isn't restricted to people of particular sex or gender or gender identity or disability or race or colour or creed or religion. It is a view, or a strategy that some or perhaps most people in all of these groups, and many besides, have adopted. Instead of being a psychopathic view where a psychopath is someone who pursues their own interest at the expense of the common good it is sometimes portrayed as a grown up view with an appreciation of the complexity of moral decision making in the real world and a maturity to embrace greyness. The justification for it as not being an immoral view is that this is the game that others are playing and if one wins while others lose one can console oneself with the knowledge that the losers would be congratulating themselves on their victory if the positions were reversed.

The same story again: consider two different approaches to the ideal of trade. One view is that it is something that is, or that should be, for the mutual benefit of both parties. The idea, here, is that trade should be good for both. Another view of the idea of trade is that one should aim to take more that one's fair share - if one can get away with it. If one can convince the other party that what one is bringing to the table is worth considerably more than it is, then one would be a fool for not rising to this opportunity. It isn't like (the assumption is) the other person is trying to conduct their business any differently. The view might be that this is the ideology of trade and this is what trade is, and should be, about. It should be understood that each party is trying to persuade the other of the immense value of what they bring to the table and is trying to persuade the other that what they bring is of less value. Of course, the idea of value, here, is an interesting one. Partly how much something is worth is determined by how much people are willing to pay for it. If people believe that Auckland real estate is scarce, for example, such that there are an excess of buyers willing to pay asking price (and financiers willing to finance them), then this boosts the amount that buyers will be willing to pay for houses in Auckland.

This view of trade where one should take more than one's fair share if one can get away with it is a game that results in a world that is worse off than what would be the case if both parties tried to come to a fair, and mutually beneficial deal. Consider the amount of energy and effort that needs to go into trying to con the other party and trying to figure out what the other party is up to. Consider the amount of energy and effort and expense that has been diverted from genuinely productive behaviour. While it might inspire a television drama with all the intrinsic fascination (and moral education) of such a show as *Shortland Street*, it seems fairly clear that without the infrastructure producers simply cannot go on producing. There is not really incentive for producers to produce when they do not get to bear the fruits of their labour. When the talented youth does not have his intellectual property respected (e.g., in a carving), then there is little incentive for them to go on to produce, and so the people stop producing arts and culture such that we might bring such things to a free trade negotiation and be a more desirable trading partner.

Of course, if you can get people to believe that they need to produce such things (for others to trade and get rich from) in order for them to have basic things like enough food to feed themselves and their kids, accommodation where it feels safe for them to walk down the street, then why wouldn't you if you can get away with it? Maybe you can inspire them to work out of fear. This position might seem attractive if you thought that those very same people would do the same to you if they had opportunity to put you there, instead. Why not work towards the vision of the world that we saw in Chapter 2? I find it hard to see how the pursuit of this ideal is in accordance with anything that deserves to be called morality.

#### 5.2 Benefit grounded in human rights

In Chapter 4 I provided an extensive introduction to the aims and founding principles of the United Nations. Particularly, we saw how the intention was to save future generations from war, reaffirm human rights, establish conditions under which justice and respect for treaty obligations can be maintained, and promote social progress and better standards of living.

While it might not be typically thought of as such, we might consider a treaty as something along the lines of a trade deal, or a co-operative agreement. In support of this notion, the intention of the Treaty of Waitangi was presumably for there to be mutual and approximately equal benefit to both parties of the arrangement. By way of brief argument for this, consider if it was not the case. Consider that signing the Treaty was for neither party to benefit. In this case, it wouldn't seem very prudent, wise, rational, or sustainable for either party to have signed it in an attempt at self-stabotage. Or, consider that the Treaty was for the benefit of only one of the parties. In this case, it wouldn't seem very prudent, wise, or rational for the other party to have signed it. The only condition under which it would be rational, prudent, or wise for both parties to have signed it would be conditions under which it was actually to the benefit of both parties.

We saw in the Charter that the United Nations puts the rights of peoples as a pre-condition for treaties. It is this notion of peoples having rights - rights to health and education and resources needed to attain such things - that grounds the idea of people being true to their word about deciding to mutually pursue peaceful co-existence rather than pursuing a path of an attempt at annihilation. The choice was made to uphold the rights of the indigenous peoples of New Zealand including their claim to soverignty (freedom and selfdetermination), health and education, and resources needed to attain such things. The intention of the Treaty wasn't to try and con Māori into giving up their rights or to con Māori into believing we were working to uphold their rights but actually taking every opportunity to take what the settlers could, when they would, at the expense of Māori for their own unequal benefit.

There has been criticism of the Treaty settlement process insofar as it is based on a capitalist economic model of resources. There has been much criticism of capitalist economics, more generally, and particularly with respect to the commodification of things that are not intrinsically finite or limited in supply, such as health and education. A Treaty settlement process that offers x amount of dollars in reparation or y amount of shares in z business has been criticised as a process that has not contributed much towards the attainment of human rights for a greater proportion of Māori (See, for example, Hurihanganui, 2018; Jones, 2018).

If the Treaty of Waitangi was a treaty where the idea was to work together when it was expedient and con and lie and swindle when that was expedient then perhaps we can just say that Māori appear to be losing. It may well be true that some or even most Māori would console themselves with precisely this if the situation had have been reversed and there was calculated to be worse health outcomes for non-Māori than Māori in society today. I suppose the greatest indicator that this may be so is to look at the inequalities that exist within Māori peoples and see, for example, whether the primary beneficiary are all, most, some, or only a few people who are Māori. While it is true that the elite non-Māori generally earn more than the elite Māori, it is also true that there is a considerable inequality between the highest paid Māori and the most deprived Māori.

This brings us to the issue that was raised in Chapter 2 about how there seems to be three notions of equity. We can agree that equity has something to do with fairness as all of the notions seemed to employ this. One way of considering equity as fairness is to consider inequalities that exist between Māori and non-Māori (a sort of horizontal equity). Another way of considering equity as fairness is to consider inequalities that exist between the highest wealth and the lowest wealth people (a sort of vertical equity). With respect to the equitable development of health and education for Māori, one might think that equity for Māori is when the kids of the elite Māori have the same opportunities for training (for example) as the kids of the elite non-Māori (so horizontal equity with legacy or inheritance). If rich white people have the opportunity to hide assets in trust funds, for example, then perhaps equity for Māori is a case where there there are similar opportunities for rich Māori.

Of course, when one considers equity within Māori (similarly to when one considers equity within non-Māori), it seems hard to credit those few people who have an excess of the resources they need putting forward cases that they still don't have enough resources because there is some other group where a few people have so very much more than they do. It seems hard to credit because they seem to have this view that it is okay that they have so very much more than the rest of their people - because their people would similarly be focused on the top and on getting more if the situation was reversed but then simultaneously holding that it is not fair that they don't have more - *in the name of equity*. In other words, they are holding a 'there but for the grace of god go I' position to justify their having more than the people beneath them, but crying foul and injustice - *and expecting that to have weight in the name of equity* when those above them have more.

This position appears to be hypocritical in the sense of there being different standards that are employed where the choice of standard seems only to be guided by what is in ones own interests narrowly conceived. This seems asymmetric or self-defeating, or does not appear to be rational, in other words. Fortunately, there is an alternative. As an alternative, we can consider that the source of the Treaty and the source of our concern with equity lies not in a trade deal where different parties were each trying to gain the upper hand over each other. It lies not even in a trade deal where some small segment of each of the parties decided to genuinely work together in order to mutually screw over the majority of each of their peoples. Instead, the source of the Treaty lies in the notion of fair trade between people who are equal in the respects that matter in the sense that they are persons with human rights who are pledging to uphold human rights and live in peace and prosperity for the good of all. The alternative would be for people to focus on taking what they can get for as long as they can get it because they can get it - which is best exemplified in overt war. This latter game of life has no recourse for people to cry 'foul! – in the name of equity!' however. This position is self-defeating. This is to say that we cannot make sense of equity consideration in this kind of hierarchical and competitive context.

## 5.3 Pascal's Wager

What shall we then say to the critic who still needs some persuading to drop the game of risk where life is nasty, brutish, and short for a great proportion of us, and start playing a game that seeks for mutual benefit and upholding of human rights? One way to look at it is in terms of something along the lines of the pay-off structure for Pascal's Wager (1670) that has been articulated more recently through the lens of game theory (see, for example, Hájek, 2017). Pascal's Wager was about whether it was rational to believe in the existence of God. The idea was that there are two ways the world could turn out: God exists, or God doesn't exist. There are two ways one could believe the world to be: One could believe in God or one could not believe in God. We can consider the pay-off structure for these 4 possible states of affairs.

The first outcome is where you believe in God and God turns out to exist. This is the best outcome. The rewards are infinite (assuming believing means you get infinite rewards in heaven). The second outcome is where you believe in God but God turns out not to exist. Pascal thought one's life would be a bit worse off for one being wrong, but not a great deal worse off. The third outcome is that one does not believe in God and it turns out God doesn't exist. This situation is better than the previous. Lastly, one might not believe that God exists, and one might turn out to be wrong. In this case the payoff is thought to be infinite harm / damnation. Pascal thought that the payoff structure meant it was more rational to believe because the possibility of infinite reward and not much harm of being wrong was significantly better (at equal odds) to the possibility of eternal damnation with not much benefit to being right.

Many problems have been pointed out with this argument for the existence of God. Most significantly, if the notion of omni-god (all powerful, all knowing, all benevolent) is internally incoherent or contradictory, then God cannot possibly exist - in which case we know the odds of God existing is not one out of two, rather it is precisely zero. Another problem is how this notion of believing is supposed to be related to the the notion of infinite reward. How plausible is it to believe that believing will result in infinite reward? While it might seem that the odds are more than 0 in which case infinity trumps all, many have resisted Pascal's Wager when it came to their being converted to believing in something roughly along the lines of omni-god (all knowing, all powerful, perfectly benevolent).

The idea of pay-off structures is an interesting one, though. Much work has been done on models of co-operativity, for example, and different co-operative strategy and the pay-offs for different co-operative strategies in encounters with other players (e.g., prisoner's dilemma type games). What I want to consider, here, is whether it is rational to believe in something along the lines of the UN's view of the world as being one where mutual co-operativity is the goal or the aim or the best way for things to be. This is opposed to something along the lines of the other view of the world as being one where players should pursue their own self-interest and merely coincide or co-ordinate their behaviour (act in accordance with morality rather than from morality) only when it is expedient for them to do so. In other words, I am going to attempt to modify Pascal's wager so it becomes an argument for buying in to something along the lines of the United Nations position on co-operativity for the good of us all.

Consider the following articulation of the pay-off structure for Prisoner's Dilemma:

	B silent (co-operate)	B betray (defect)
A silent (co-operate)	A=1yr and B=1yr	A=3yrs and B=free
A betray (defect)	A=free and B=3yrs	A=3yrs and B=3yrs

The idea is that A and B are both prisoners who are being held in separate cells. Each prisoner is presented with the following offer: If neither of you talk, you will both be sentenced to 1 year in jail. If you turn in your accomplice and your accomplice does not talk, then you will be set free and they will be jailed for 3 years. If your accomplice turns you in and you do not talk, then your accomplice will be set free and you will be jailed for 3 years. If you both talk, then you will be jailed for 3 years. If you both talk, then you will be jailed for 3 years. If you both talk, then you will be jailed for 3 years.

The standard analysis of the above game is that it poses something of the following dilemma: Either B will co-operate or defect (first column vs second column). If B co-operates (first column) then A should defect because going free is better for A than serving for 1 year (third quadrant > first quadrant). On the other hand, if B defects (second column) then A should defect because serving 2 years is better for A than serving 3 years (fourth quadrant > second quadrant). So whether B co-operates or defects (either column) A should defect. Parallel reasoning will show that B should defect. In this way, we are led to the conclusion that regardless of what the other player decides to do each prisoner should (if they desire to be game theoretic rational) defect.

A more general formulation of the Prisoner's Dilemma is that it is a game whereby the pay-off structure is such that co-operation brings R reward, defection brings P punishment, if one defects while the other co-operates the defector gets T temptation pay-off and the co-operator gets S sucker payoff. The quantitative values are such that T > R > P > S and each player decides what to do on the basis of considering contingencies about what will happen if the other player behaves in this or that way:

	B silent (co-operate)	B betray (defect)
A silent (co-operate)	R/R	S/T
A betray (defect)	S/T	P/P

If everyone adopts the strategy of the pursuit of individual advantage (T/S), then that will result in a world in which (P/P) comes to be. Unless you can persuade someone to work co-operatively or collaboratively while taking them for a fool. This formulation allows us to see the problem for the problem it is: A wicked problem, indeed. The problem is wicked in the sense I introduced in the introduction where the optimal solution to the problem is dependent on the way in which we frame the problem. We need not frame the problem through the lens of the psychopath who is interested in their own personal advantage (in the name of game theoretic rationality) so as to aspire to unequal outcomes where they are the primary beneficiary at the expense of the other and where the likely outcome is the worst possible outcome for all players. We need not view the best possible outcome is to take someone for a sucker if you can get away with it by successfully undermining the co-operative or collaborative project. Let us instead consider the pay-off structure that could sustain a co-operative or collaborative dyad:

	B silent (co-operate)	B betray (defect)	
A silent (co-operate)	2 years jail total	3 years jail total	
A betray (defect)	3 years jail total	4 years jail total	

Now we can employ the previous argument: Either B will co-operate or defect (first column vs second column). If B co-operates (first column) then A should co-operate (because 2 years jail total is better for the prisoners / the gang than 3 years jail total). On the other hand, if B defects (second column) then A should co-operate because 3 years jail time is better than 4 years jail time.

Parallel reasoning will show that B should co-operate. In this way, we are led to the conclusion that irrespective of what the other decides, each prisoner would be game theoretic rational when it comes to the interests of the group or gang, to co-operate. The general formulation is the rather intuitive: 2 years jail > 3 years jail > 4 years jail. The reason why I like to think of this along the lines of Pascal's Wager is because Pascal's Wager was about trying to persuade a person to work towards an ideology that was greater than the short term interests of one person.

It should come as no great surprise that no amount of co-ordination of psychopathy or the pursuit of self-interest will get us co-operation (win-win cooperation) or morality. We know from work on collective intentionality (e.g., Searle) that no amount of individual intentionality of the form 'I know that p' and 'you know that p' and 'I know that you know that p' and 'you know that I know that p' will get us to collective intentionality of 'we know that p'. It should come as no surprise that pursuit of individual self-interest will not get us win-win co-operativity.

### 5.4 The Original Position

Previously we considered some of the game theory models that arose out of the attempt to understand how co-operation or morality could have arisen out of a state of nature. Previously, we also considered how morality could arise out of the pursuit of an ideal or ideology of participating in something greater than oneself in the form of God. One idea of looking to an aspirational ideology (that is internally coherent) is that we can't really explain how morality evolved, but we can explain how our cognitive capacity and empathy evolved and our cognitive capacity and empathy then allows us to apprehend such things as triangles, and also such things as the original position. And then we can choose to work towards the realization of various things, including the view of

life, that follows from that. Not because of rewards in heaven but because of making the universe more heavenly for an increasingly greater proportion of players.

The original position was described by Rawls (1971) as a thought experiment to help us clarify our moral concepts of justice (see also Freeman, 2016). The original position attempts to elicit our apprehension of impartiality of judgement and equality of persons. The original position is a situation that is fair among all parties to a social contract. The idea is that if the parties are fairly situated and take all relevant information into account, then the principles they agree to and the laws and institutions required by the principles will also be both fair and just.

On Locke's version of a social contract, people know all information about their natural talents, racial and ethnic group, social class and occupations, level of wealth and income, their religious and moral beliefs, and so on (Freeman, 2016). The problem is that these factors are not good reasons for depriving people of their equal political rights or opportunities to occupy social and political positions or for positions involving governing or administrating society. There is evidence that people discriminate - either consciously or unconsciously - against people on the basis of factors such as these (e.g., Atewologun, Cornish, and Tresh, 2018).

This avoidance of bias is why Rawls situates the parties to the social contract so they are under a veil of ignorance with respect to factual knowledge that can distort their judgments and result in unfair principles. According to the veil of ignorance, it is essential that no one knows his place in society, his class or social status, his fortune in distribution of natural assets and abilities, intelligence, strength, and so on. This veil of ignorance is designed to be a strict position of equality that represents persons purely in their capacity as free and equal moral persons. They have their higher order interests in common in developing the moral powers of justice and rationality, their need for primary social goods such as civil and political rights, liberties, income and wealth, the social bases of self-respect, and so on. This veil allows people to deliberate on the basis of equal respect for moral persons. While Rawls was clear that the original position is not supposed to be a statement of historical event – it is not the story of the evolution of morality or even of the history of morality - we might do well to consider how we can employ something like the veil of ignorance when it comes to (for example) deciding on who should take positions of office.

Rawls' did not consider Medicine as a social institution that requires cooperativity, but it does rely on co-operation from the people. People allow their infants to be injected with immunizations trusting that medicine is helpful for them and their people, and medicine is not exploiting them and their people for the benefit of some other group of people. Similarly, people donate blood and organs because they trust that blood and organs may be available to them and their people, should they need them. If it were discovered that the primary donors were a group of people significantly different from the primary recipients and the primary donars were excluded from being primary recipients, then this would go rather a long way towards undermining public trust in medicine so that people simply opt out of donation systems. If it were found, for example, that most of the blood was donated by New Zealanders but shipped to Australia to be used by Australians, or that it was donated by people in the public sector and only made available to people in private clinics, then this would go rather a long way towards undermining public confidence in medicine. People who were less likely to be given things they needed by medicine when they required them would become less likely to donate those things to others if the expectation of fairminded reciprocity was undermined.

People present to GPs trusting that they will be referred on for appropriate tests, procedures, and medications and not simply have their data collected for participation as control members of some observational study on the natural

progression of disease. They trust that they will be referred on and / or treated and not simply have their data recorded to be used for health insurance companies calculations of premiums in the name of access to healthcare or medical treatment. People provide blood and other tissue samples for analysis trusting that they will be informed if abnormalities are found, and they will be referred for appropriate treatments in a timely fashion. If it turned out that samples were being collected so that medicine could learn from them and then only use the information that was learned to help a very different group of people then again, that would undermine public co-operation that is required for the sustainability of medicine and medical institutions. My point is not that these things are happening. My point is that there needs to be structures in place to ensure that these things do not happen. The public trusts that those structures are in place and that these things do not happen. If it turns out that there are no such structures or if it turns out that the structural rules are routinely and repeatedly ignored or violated then public trust in medicine and medical institution would be misplaced trust as those who are most vulnerable are being exploited for the primary benefit of others in an institution that relies on public trust to obtain the samples and information it requires for it's development.

The social institution of medicine wants particularly poor people to have their children immunized. The social institution of medicine wants particularly poor people to provide screening or biopsy samples of tissues, organs, and tumors when advised to by public health or by their medical provider. Medicine wants people to have procedures (colonoscopy, cervical smears, mammogram) when requested. Medicine wants a diverse range of people to provide blood for transfusion and organs for donation for greater supply. Medicine wants fairly much exclusive prescription powers. Medicine wants exclusive autopsy powers with respect to examination of the dead, and the recovery of implanted devices and materials. Medicine, in New Zealand, needs to realize that if medicine wants the people to comply in this, that, and the other respect –

then medicine has duties to the people. It is only because the people trust medicine that they allow medicine to have the status that it does. Medicine has a duty to ensure the infrastructure is in place such that medicine is worthy of that trust otherwise medicine is not sustainable. There is a concern that all of this is nothing other than thinly veiled co-oercion for foreign military for the primary benefit of protecting their ground troops when our Government does not seem to be concerned with these issues or concerned with developing the infrastructure that can ensure a more equal distribution of the costs of production of medical knowledge so as to prevent situations we saw at the start of Chapter 3 such as the Tuskegee study and to prevent recurrence of situations such as that resulting in the Cartwright Inquiry.

One of those duties is to make sure that medical treatments are equitably distributed. Another of those duties is to make sure that medicine itself (as an institution) is as diverse as the people medicine expects to do what it is that medicine asks of them. If medicine wants to particularly target a certain segment of society (e.g., by having the majority of people requiring / requesting treatments being Māori, Pacific Islander, disabled etc.,) then medicine needs to accept that it is just and equitable to have a similar level of representation amongst its ranks. It is not acceptable for those who are most often the object of medical inquiry or investigation being excluded from fair equality of opportunity to certain positions of office. This realisation relies on a certain amount of empathy, however, with respect to the ability to grasp different positions in society and figure out a way (an equitable distribution) that works for the greater benefit of all. This position is required if Medicine wishes to persist as an institution. If it is for the benefit of only a small few then it is not sustainable, and people will start realizing that they actually do not have access to medicine – it is something that is medicine in name only that has access to them - and this is not a fair or co-operative situation. It is a rare person who can freely and without resentment sacrifice his or her life prospects so that those who are better off can have even greater comforts, privileges, and powers. This is not a just thing to expect of people. If we accept that the preference of the sadist for sadism and the massochist for massochism does not count then nobody in their right mind would voluntarily consent to that.

## 5.5 Birthright to the 'upper hand'

In 2004, the New Zealand politician Don Brash (as leader of the opposition) gave a speech to the Orewa Rotary Club where he stated that 'We are one country with many peoples, not simply a society of Māori and Pākehā where the minority has a birthright to the upper hand (Brash, 2004)'. The idea of an 'upper hand' comes from arm wrestling where the competition does not start from a position of vertical neutrality but where the competition starts with an advantage. This can be understood as analogous to 'having a leg up' in the game of wrestling or Brazilian Jiu Jitsu. The idea is that the advantage that is given is such a competitive advantage that success for the minority is assured. He also said that 'in both education and healthcare, government funding is now influenced not just by need - as it should be - but by the ethnicity of the recipient (Brash, 2004)'. Brash's speech was a response to the capitation funding that we saw in the last chapter. The typical response in the literature has been to defend capitation funding on the grounds that it helps Māori and that Māori need a little help. I am interested, here, to focus on this idea of a minority with a birthright to the upper hand, however.

Poole, Moriarty, Wearn, Wilkinson, and Weller (2009, pg., 91) describe that:

Up until about 20 years ago, the predominant medical student characteristics were being white, male, coming from a higher socioeconomic group, and having university-educated parents, including one in eight with a parent in medicine. In 2001, there was a New Zealand Wellbeing, Intentions, Debt and Experiences (WIDE) survey of medical students (Fitzjohn, Wilkinson, Gill, and Mulder, 2001). 258/1377 reported attending a private secondary school for the bulk of their schooling and 164 reported an integrated (previously private but now partially public) secondary school. 242/1380 report at least one parent who was a medical practitioner and 43 students reported both. We were told the survey results may have been biased because some permanent residents did not participate due to believing it to be a survey of debt (which they didn't have).

We hear that:

internationally there have been calls for medical schools to provide more evidence of their impact on the public good. One aspect is the expectation that the population of doctors reflects the social and ethnic diversity of the community it serves (Pool, Moriarty, Wearn, Wilkinson, and Weller, 2009, pg., 91).

The rationale for diverse representation, as they see it, is that:

This expectation is underpinned by two main principles. The first is based on social justice and equity of access for minority groups; the second, because of a diversified student population may be more disposed towards addressing priority areas of need (Pool, Moriarty, Wearn, Wilkinson, and Weller, 2009, pg., 91).

We also hear that:

In both NZ schools there are over three eligible applicants for every one place offered. As such, decisions may be based on very small differences in scores, and many who would otherwise be fine doctors are declined entry (Pool, Moriarty, Wearn, Wilkinson, and Weller, 2009, pg., 91).

So we have the issue of how to select which of the applicants shall be determined to have applications that are successful in a way that mirrors diversity in society. In this section I have provided evidence that there is currently lack of diversity (children of doctors and wealthy parents are over-represented). The lack of more recent evidence has come from the lack of more recent studies that have been published on this issue and the lack of information that has been made public despite a number of requests for information under the official information act. In Chapter 1 we considered the socio-economic gradient to health. In Chapter 2 we considered inequalities in New Zealand society. Here we have these ideas coming together and the suggestion that in New Zealand we have a competitive situation with people trying to get or take the 'upper hand'.

#### 5.6 Inclusion and empowerment

We saw in Chapter 1 that medicine plays a role in determining who is and who is not disabled (and in determining what kind of disability they have). This is in part because of the control that Medicine has over diagnostics and the role that Medical Doctors play with respect to expert testimony in a court of law. Medicine also plays a role in determining what disability status amounts to and more particularly with respect to predicting likely futures. While judges are supposed to assess capacity and juries are supposed to assess intent, medical doctors may be called on to provide expert witness as to mental state or mental status or to physical capacity or incapacity - both to help judges decide, and also to assist with juries. It is important to remember that an early use of medical diagnosis - of feeblemindedness or mental disorder - was to render an otherwise qualified person *illegitimate* in the name of equity. For example, if the first born son was feebleminded or mentally ill, then it would be *equitable* if - in response to expert medical testimony - the judge were to rule the estate be returned to the family. It might be the case that the second born son inherit the estate, or, if there are no sons, pehaps a daughter or mother. If there is no family, perhaps the estate could be transferred to some other party such as a medical institution or the institution of the church in exchange for caring or treating the mentally ill person.

This is the context in which we need to understand *Division of Health Sciences Declaration and Police Vetting Forms* that applicants to the University of Otago are required to fill out at time of application for Professional Practice programmes. The form consists of 3 components: A 'Health and Conduct Self-Declaration', 'New Zealand Police Vetting Request' and 'Declaration of Immunisations and Infectious Disease Status'.

The form clearly states

[I]f you are in doubt concerning the appropriate responses to the questions in this section you are strongly recommended to seek advice from the Admissions Office and / or appropriate registering professional body. Failure to declare any relevant matter may lead to your exclusion from any programme of study for which you are accepted.' In other words, one's responses to the questions on the forms may be used to exclude otherwise qualified applicants from selection into Professional Practice, including Medical Program. If one does not disclose and one is accepted, then down the track one's acceptance may be rescinded.

With respect to 'Fitness to practice' declaration, people are asked 'Have you ever been diagnosed with, or assessed as having a health condition or impairment which may either limit your ability to undertake the requirements of the programme, or which may require adaptations to the workplace or work procedures, to enable you to undertake the requirements of the programme in a manner which is safe for you and others?' The form continues

if yes, please give details below, including any accommodations that would be required to enable you to undertake the programme of study. Note: It is important that this section is filled out correctly and truthfully. Failure to declare any relevant matter may lead to your exclusion from any programme of study for which you are accepted. The information will be used to ensure all successful applicants are provided with the appropriate support. You may seek advice from the Admissions Office or the University's Manager of Disability Information and Support who will, if necessary, act as an advocate or facilitator in your interest.

While applicants are assured that the information will be used to assure that 'successful' applicants are given the support they need, they are not requiring this information from 'successful' applicants. The University requires this information from *all* applicants, and they are explicit they are eliciting this information for the purposes of deciding which of the otherwise qualified applicants they may choose to *exclude* from selection. They do not say whose judgement determines what is or is not 'relevant' but instead threaten that if something is later deemed to have been relevant then it may also be used to exclude otherwise qualified people who have been selected to study in professional practice (including Medical) programmes. Applicants are not told that they may be advocaters or facilitators in their own interest (for example, they are not told that they will be contacted if the University is in the process of making a decision to exclude them) or that they may select who it is that they wish to represent their interest (e.g., a lawyer). They are very clear that disability is being considered in the context of, or for the purposes of, reason to *exclude* an otherwise qualified candidate. This is nothing other than discrimination.

This is also a situation where it is perfectly possible to adopt something along the lines of the veil of ignorance by simply *not asking* candidates about this information prior to candidate selection. Once candidates have been selected and before they accept an offer of place is the appropriate time to discuss accommodations and the reasonableness or otherwise of requests for accommodations. The only grounds the University could have for requesting this information about a candidate prior to selection would be if they were intending to use it to ensure that members of equity groups weren't being unfairly discriminated against by way of their selection algorithms.

Presently, information about equity groups seems to be requested not for the purposes of *increasing* representation but rather *discriminating against otherwise qualified applicants*, however. Or perhaps the idea is to collect data on the equity group status of applicants for several generations in the name of equity and call that an intervention? We should ask who profits from that situation. It is clearly a situation where people without disability are profiting at the expense of people with disability because they are taking the training places of otherwise qualified candidates who have not been selected solely because they have disability.

With respect to the police vetting form, while it may be understandable to seek information about known offenders (though, again, innocent until proven guilty and applicants should have the opportunity to speak on their behalf before being excluded), applicants are informed the police will be asked for

information regarding family violence where I was the victim... Or witness... primarily [but not restricted to] where the role being vetted takes place in a home environment where exposure to physical or verbal violence could place vulnerable persons at emotional or physical risk.

In other words, the University of Otago considers it appropriate to employ the

use of a vetting form for the stated purpose of allowing them to discriminate against people who have had previous experience of *victimisation* / who have witnessed victimisation. It is important that we recognise the use to which 'vulnerable child' labels may be put however many years down the track. We need to ask who profits from the Medical Admissions Committee believing they have the right to exclude anyone who has been victimised or experienced victimisation in a country such as New Zealand where these experiences have been considered (e.g., by our Prime Minster) to be endemic. One justification is that it is for the applicants own good - but this is still nothing other than a way of rendering ineligible and excluding otherwise qualified candidates and also a poor use of medical paternalism that we saw in Chapter 2. It is precisely this sort of use of medical paternalism that has led disability rights advocates and activists to say there should be 'no about us without us' and campaign for and end to discrimination in the basis of disability and to campaign for their right to fair equality of opportunity to be included in offices and positions that they are qualified for.

With respect to the 'Declaration of Immunisations and Infectious Disease Status', again, in order not to discriminate against applicants on the basis of their health condition, the University should not ask or seek this information about applicants prior to their selection. All applicants should be informed about requirements for all students who take places to have immunisations and to have check-ups with respect to disease status including information about who should be notified and treatment regimes that are required to be adhered to for fitness to practice. This would capture the concerns with respect to potential harms to patients. Asking for this information prior to applicants being selected when the information will only be used to exclude applicants from having their applications considered / accepted is not appropriate.

We need to get clear on two steps: Firstly, we need to stop discriminating against people by saying they are ineligable to apply or by culling their application in the initial phases prior to ranking. Secondly, we need to look at what inequalities remain in the ranking selection once we have stopped overtly discriminating against otherwise qualified people and at that stage look more closely at adjusting the weighting on our selection algorithms until they result in what it is that we require: Sustainable medical schools and medicine for New Zealanders. We simply don't need to collect this data prior to selection (in the name of an equity intervention no less) and observe the process continue to discriminate against people for several more generations. We should ask who profits from the current situation and release raw data. This is a matter of considerable public interest for the New Zealanders and international investors who have worked for inclusion in the New Zealand medical system because they trusted the system to provide fair equality of opportunity and to consider their application on it's merits.

We are not provided with information about the percentage of Māori and Pacific Island applicants who are *declined* entry to Medicine. We are told that at Auckland there is 'the exception of a small number of students included or excluded directly as a result of interview performance', however (Poole, Moriarty, Wearn, Wilkinson, and Weller, 2009, pg., 90-91). The implication, here, seems to be that Māori and Pacific Island students interview *better* than non-Māori and Pacific Island students - which is why the idea of separate interview for Māori and Pacific Island students is supposed to be in the name of equity. Again, it is important that the equity criterion not be employed as a way of ruling out otherwise qualified candidates (e.g., members of equity groups who would have gotten in by way of standard entry pathways if they had not been excluded for no other reason than their being a member of an equity group).

It is unclear who the primary beneficiaries of 'Rural Origins' policies are because we are not provided with the socio-economic status information about those applying compared with those accepted in under that category. There are private boarding schools in rural communities and it isn't so far fetched to suppose that those who have historically benefited the most are most well positioned to benefit from rural origins criteria. There wasn't a shortage of general practitioners in, for example, affluent parts of Central Lakes District or the Hawkes Bay. We need to remember who the primary beneficiaries of equity policies were supposed to be and why. I introduced the idea of geographical disadvantage in Chapter 3 and affluent communities such as Central Lakes, the Hawkes Bay, and Waiheke Island do not compare to the disadvantage experienced by people living in the Australian Outback or rural South Africa. Equity places were not supposed to be for people who thought they could take (or keep) the upper hand - just so long as they could get away with it. We need to think about whose interests are being served by propogation of the belief that entry to Medicine is necessarily or intrinsically *competitive* as people have the very same ends - to be head of a hierarchy for the good of themselves, primarily.

My point here is not that there necessarily *is* discrimination against equity candidates. My point is that there *may be* discrimination against equity candidates at present and it is something that is of public interest enough for people to look into the raw data and see. Presently, the University of Otago seems to be very upfront about collecting data on non-Māori and Pacific equity groups for the primary purpose of discriminating against otherwise qualified applicants. It is very unclear who the primary beneficiaries are of the rural origins equity category, and it would be a matter of public interest if it turned out that the primary beneficiaries of the previous system had decided to introduce an equity criterion in the name of themselves in exchange for an equity criterion for Māori. This win-win analysis missed the point of fairness in distribution, however. If it were the case (for example) that 1 in 8 medical students still had parents who were medical doctors (and perhaps no applicants who had parents who were medical doctors had their application deemed unsuccessful) then this would go rather a long way towards undermining public confidence in Medicine. We need some kind of assurance that this is not the case - or that if it is, at the very least, we are going to stop actively discriminating against applicants with disabilities, applicants who may have been abused / witnessed abuse as children, and so on. Saying we are doing it for their own good just doesn't ring true the way things have been going in New Zealand as we saw in Chapter 2.

There is some controversy over what we should call the people who use the public health system (Pearl, 2015; Murphy, 2017). They were traditionally known as 'patients' - because they had to be patient in the sense of waiting upon the doctor. They have more often come to be known as 'clients' or 'consumers' by managers and administrators, however. Partly, as we have come to adopt a more standard market-place view of health-care as something to be purchased (whether by individuals, individuals insurance companies, or by the state). Calling them 'consumers' makes healthcare something to be brought and sold like other consumables (Sachin, 2018). Calling them 'citizens' would emphasise the fact that they are citizens, too, with rights and duties of good citizens the same as the people who are making the decisions when it comes to the running of our health system (even when the people making the decisions when it comes to the running of our health system prioritise health insurance plans for themselves). They often seem to be known as 'the other' by those employed within the system. It is strange to think that a person sitting on a local school board wouldn't think of sitting on that school board while sending their own kids off to (for example) a rural boarding school and yet a person sitting on a district health board thinks nothing of taking out private health insurance and not seeking medical care in the public sector they have taken a role in administrating. Citizens have duties to the government - but governments have duties to the people.

Certain people are fairly much forced to be users of the public health system in this country and this means they are fairly much forced to take whatever care is offered to them. Medical students learn in our public hospitals. They go on to become qualified and largely choose to work for private practice. We need to consider whether it is fair to expect people with disabilities, primarily, but also Māori people, poor people, Pacific people to bear the cost of other people learning to practice Medicine while being excluded from similar positions on grounds that they are equity group members.

In this thesis I have considered different models of disability so we have a better idea of where different groups are coming from. From the typical Medical view of problems with components to an economic view of the distribution of illhealth to the ideal views of the United Nations and World Health Organisation. I considered inequality of income, wealth, resources needed to attain health with a primary focus on healthy housing. I considered how the transition from the ideal of health to the reality of focus on immunisation compliance and reduction in emergency room wait times has the potential to miss the point when it comes to empowerment of our people. More particularly, I considered how the focus on the Treaty of Waitangi as grounding equity for Māori has likely done Māori has both likely done Māori a disservice and ignored the genuine equity interests of other minority groups in New Zealand. I then considered equity groups as groups and instead of focusing on intrinsic features for stabilising the trajectory or projected futures for people who are members of equity groups I introduced the idea of statistical parameters which raises the idea of how people can bet on outcomes and invest accordingly in the name of equity.

In Chapter 4 we looked at capitation funding which placed a dollar value on the burden of being a member of an equity group, or similar, in the name of equity, even when it wasn't clear how it was supposed to empower equity group members. This was an example of how people can invest in the name of equity by targeting equity group members. Lastly, in this chapter I considered two arguments for why we should pursue the ideal of co-operation for mutual benefit instead of committing to a path whereby we take more than our fair share for as long as we can get away with it. Firstly I considered, an argument from symmetry with respect to attitudes that we might have about the fairness / unfairness of people having both less than, and more than, us. Secondly, an argument from a modified version of Pascal's Wager with respect to conducting oneself so as to leave open the possibility of genuinely co-operative (compared with merely co-incidental) activities and the sustainability of collaborative enterprise.

I then considered how presently we don't seem to be doing so well on refraining from discriminating against which is required by both current domestic and international laws. This perhaps isn't so surprising when considered together with what we saw about the trajectory of inequality in New Zealand, particularly, in chapter 2. I ended with the recommendation that we develop a more sustainable - and accountable - infrastructure so that we can bring first world Medicine and Surgery to New Zealand and to New Zealanders of all groups and incomes. Unfortunately, many appear to have tied their fortunes to alternative futures. In only April of 2017 Bennett informs us that 'Nine years after New Zealand agreed to sign up to the United Nations Declaration on the Rights of Indigenous Peoples in relation to Maori, the Government has announced it will begin work on developing a plan to implement it' (Bennett, 2019). It is good to see the New Zealand Government accept that Māori are New Zealander's too and it is time for New Zealander's to recognise the equity groups of a greater proportion of New Zealander's and New Zealand interest groups going into the future. It is time the peoples of New Zealand started holding the Government of New Zealand to account.

# References

- Akoorie, N., and Wiggins, A. (2018) DHB bosses and board members cost taxpayers \$65 million a year. In *The New Zealand Herald* 27 January. From https://www.nzherald.co.nz/nz/news/article.cfm?c\_id= 1&objectid=11973283
- Allen, R. (trans) (2006) Plato: The Republic. Yale University Press. New Haven.
- Atewologun, D., Cornish, T., and Tresh, F. (2018) Unconscious bias training: an assessment of the evidence for effectiveness. Equality and Human Rights Commission Research report 113. From: https://warwick.ac .uk/services/ldc/researchers/resource\_bank/unconscious\_bias/ub\_an\_ assessment\_of\_evidence\_for\_effectiveness.pdf
- Baum, F. (2015) The new public health, 4<sup>th</sup> edition. Oxford University Press, Australia.
- Beaglehole, R., and Bonita, R. (eds) (2009) Global public health: a new era.
  2<sup>nd</sup> edition. Oxford University Press
- Bennett, L. (2019) Sluggish NZ gets to grips with UN declaration. In The New Zealand Herald 9 April.
- Berke, J. (2019) Self identification in the deaf community. From: https://www.verywellhealth.com/deaf-culture-big-d-small-d-1046233

- Bierre, S., and Howden-Chapman, P. (2017) Telling stories: the role of narratives in rental housing policy change in New Zealand. *Housing Studies*
- Bickenbach, J. (2016) Disability and Health Care Rationing. In *The Stanford Encyclopedia of Philosophy* Spring Edition. Zalta, E (ed) From: https://plato.stanford.edu/archives/spr2016/entries/disability-care-rationing/
- Bird, A and Tobin, E. (2018) Natural Kinds. In The Stanford Encyclopedia of Philosophy Spring Edition. Zalta, E (ed) From: https://plato.stanfo rd.edu/archives/spr2018/entries/natural-kinds/
- Brash, D. (2004) Nationhood: An address by Don Brash Leader of the National Party to the Orewa Rotary Club on 27 January 2004. From: http: //www.scoop.co.nz/stories/PA0401/S00220.htm
- Brawley, O. (1998) The study of untreated syphilis in the negro male. International Journal of Radiation Oncology, Biology, Physics 40, pg., 5-8
- Brodtkorb, E., and Nakken, K. (2015) The relationship between epilepsy and religiosity illustrated by the story of the visionary mystic Wise-Knut. *Epilepsy Behaviour* 46, pg., 99-102 From: https://www.ncbi.nlm.nih .gov/pubmed/25934587
- Burgess, A., Roberts, C., Sureshkumar, P., and Mossman, K. (2018) Multiple mini interview (MMI) for general practice training selection in Australia: interviewers' motivation. *BioMed Central Medical Education* 18, 21, pg., 2-8.
- Charlton, J. (1998) Nothing about us without us: Disability oppression and empowerment. University of California Press, California

College Board. (2012) AP Economics Microeconomics Macroeconomics Course

Description. From: https://apcentral.collegeboard.org/pdf/ap-econ omics-course-description.pdf?course=ap-macroeconomics

- Commission on Social Determinants of Health. (CSDH) (2008) Closing the gap in a generation: Health equity through action on the social determinants of health. *Final report of the Commission on Social Determinants of Health.* World Health Organisation, Geneva.
- Conklin, J. (2005) Wicked problems and social complexity. In Dialogue mapping: building shared understanding of wicked problems. Wiley. From http://www.cognexus.org/wpf/wickedproblems.pdf
- Cormack, D., and Robson, C. (2010) Ethnicity, national identity and 'New Zealanders': Considerations for monitoring Māori health and ethnic inequalities. Te Rōpū Rangahau Hauora a Eru Pōmare, Wellington. From https://www.otago.ac.nz/wellington/otago600094.pdf
- Crampton, P., and Foley, J. (2008) Why are we weighting? Equity considerations in primary health care resource allocation formulas. In Matheson, A. and Dew, K (eds), Understanding Health Inequalities in Aotearoa, New Zealand. Otago University Press, Wellington.pg., 133-145
- Crampton, P., Weaver, N., and Howard, A. (2012) Holding a mirror to society? The sociodemographic characteristics of the University of Otago's health professional students. New Zealand Medical Journal 1361, 125, pg., 12-28. From https://www.nzma.org.nz/journal
- Crampton, P., Weaver, N., and Howard, A. (2018) Holding a mirror to society? Progression towards achieving better socio-demographic representation among the University of Otago's health professional students. New Zealand Medical Journal 1476, 131, pg., 59-69. From https://www.nzma.org.nz/journal

- Cumming, J. (2017) New Zealand's health service performs well, but inequities remain high. The Conversation. From https://theconversation.co m/new-zealands-health-service-performs-well-but-inequities-remainhigh-82648.
- Dahlgren, G., and Whitehead, M. (1991) Policies and strategies to promote social equity in health. Background document to WHO – strategy paper for Europe. Stockholm Institute for Futures Studies, Stockholm.
- Dew, K., and Matheson, A. (eds) (2008) Understanding Health Inequalities in Aotearoa New Zealand
- Dirksen, H., Bauman, L., and Murray, J. (eds) (2014) Raising the stakes for human diversity. University of Minnesota Press. From: https:// ebookcentral-proquest-com.ezproxy.waikato.ac.nz/lib/waikato/detail .action?docID=1833637
- Doris, J. (2005) Lack of character. Cambridge University Press.
- Durham, J., Brolan, C. E., and Mukandi, B. (2014) The convention on the rights of persons with disabilities: A foundation for ethical disability and health research in developing countries. *American Journal of Public Health* 104, 11, 2037-43. From http://ezproxy.waikato.ac.nz/ login?url=https://search-proquest-com.ezproxy.waikato.ac.nz/docvie w/1619997030?accountid=17287
- Ellington, J. (trans) (1993) Kant, I. (1785) Grounding for the metaphysics of morals. 3<sup>rd</sup> edition. Hackett.
- "Equity" (2019) Merriam-Webster.com. From: https://www.merriam-webster.com/dictionary/equity
- Green, J., Tones, K., Cross, R., Woodall, J. (2015) Health promotion planning and strategies 3<sup>rd</sup> edition. Sage Publications Ltd.

- Fatahi, A., Sadeghi, H., and Ameli, M. (2017) Relationship between Q angle and knee injuries prevalence in elite volleyball players. Advances in Surgical Sciences pages 45-48. From http://www.sciencepublishingg roup.com/journal/paperinfo?journalid=256&doi=10.11648/j.ass.2017 0504.11
- Fisk, G., and Macho, G. (1992) Evidence of a healed compression fracture in a Plio-Pleistocene hominid talus from Sterkfontein, South Africa. *International Journal of Osteoarchaeology* 2, 4, pg., 325-332. From: https://onlinelibrary.wiley.com/doi/pdf/10.1002/oa.1390020408
- Fitzjohn, J., Wilkinson, T., Gill, D., and Mulder, R. (2003) The demographic characteristics of New Zealand medical students: The New Zealand wellbeing, intentions, debt and experiences (WIDE) survey of medical students 2001 study. *The New Zealand Medical Journal.* 116, 1183, pg., 1-9. From http://www.nzma.org.nz/journal/
- Frank, R. (1988) Passions within reason: The strategic role of the emotions Norton, New York.
- Freeman, S (2016) Original Position. *Stanford Encyclopedia of Philosophy*. From https://plato.stanford.edu/entries/original-position/
- Gould, B. (2010) Political implications for New Zealand. In No ordinary deal: unmasking the trans-pacific partnership free trade agreement. Kelsey,
  J (ed) Bridget Williams Books with the New Zealand Law Foundation,
  Wellington.
- Goraya, A., and Scrambler, G. (1998) From old to new public health: Role tensions and contradictions. *Critical Public Health*, 8, 2. pg., 141-151.
- Grant Thornton New Zealand Ltd. (2016) Central Region's Technical Advisory Services: True costs of the pharmaceutical supply chain. From http s://tas.health.nz/assets/Publications/Pharmacy-Documents/Pharm

aceutical-Margins/grant-thornton/GTNZ-R-TAS-True-Costs-of-the-Pharmaceutical-Supply-Chain-v03.3-dated-17.11.2016.pdf

- Griffiths, P. (1997) What emotions really are: The problem of psychological categories. University of Chicago Press, Illinois.
- Hacking, I. (1999) The social construction of what? Harvard University Press, Massacheusetts.
- Hacking, I. (2001) Rewriting the soul: Multiple personality and the sciences of memory Princeton University Press, Princeton.
- Hájek, A. (2018) Pascal's Wager. Stanford Encyclopedia of Philosophy'. From: https://plato.stanford.edu/entries/pascal-wager/index.html
- Halpern, D. (2004) A cognitive-process taxinomy for sex differences in cognitive abilities. Current directions in psychological science 13, 4, pg., 135-139
- Hargreaves, B. (2017) Changing the Rental Rules? NZ Residential Rental Market, 20, 3. From http://www.massey.ac.nz/massey/fms/Colleges/Col lege%20of%20Business/School%20of%20Economics%20&%20Finance/ research-outputs/mureau/nz-residential-rental/Sept%202017%20Pub. pdf?9FF21B844A40BC66945AEC9989F6F98A
- Haslanger, S. (2013) Resisting reality: Social construction and social critique Oxford University Press, Oxford.
- Hawe, P., Degeling, D., Hall, J (1990) Evaluating health promotion a health worker's guide Elsevier, Australia.
- Haworth, N. (2013) The rewards of work. In *Inequality: a New Zealand crisis*, Rashbrooke, M (ed). Bridget Williams Books Limited, Wellington. pg., 198-212

Hoffenberg, R. (2006) Advance healthcare directives. In Clinical Medicine, 6,

3. pg., 231-233. From: http://cdhb.palliativecare.org.nz/Advance%20Healthcare%20Directives.pdf

- Howden-Chapman, P., Bierre, S., and Cunningham, C. (2013) Building inequality. In *Inequality: a New Zealand crisis*, Rashbrooke, M (eds). Bridget Williams Books Limited, Wellington. pg., 105-119
- Hurihanganui, T. (2018) Crown unfairly negotiated settlement deal Tribunal. Radio New Zealand. From https://www.radionz.co.nz/news/te-manu -korihi/355333/crown-unfairly-negotiated-settlement-deal-tribunal
- Illes, J. (2018) Wellington introduces pop-up apartments for the summer. Dominion Post From https://www.stuff.co.nz/dominion-post/news/108 955050/wellington-introduces-pop-up-apartments-for-the-summer
- Jones, C. (2018) Crown's Treaty settlement negotiations 'nor fair or reasonable'. *Radio New Zealand*. From: https://www.radionz.co.nz/news/n ational/355429/crown-s-treaty-settlement-negotiations-not-fair-or-re asonable
- Jones, C., Braithwaite, V., Healy, S. (2003) The evolution of sex differences in spatial ability. *Behavioural Neuroscience* 117, 3, pg., 403-411.
- Joseph, P., Craig., Caldwell, P. (2015) Clinical trials in children. British Journal of Clinical Pharmacology 79,3 pg., 357-369. From https: //www.ncbi.nlm.nih.gov/pmc/articles/PMC4345947/
- Kelsey, J. (ed) (2010) No ordinary deal: unmasking the trans-pacific partnership free trade agreement Bridget Williams Books, Wellington.
- Kelsey, J. (2015) The fire economy: New Zealand's reckoning Bridget Williams Books, Wellington.
- Khan, C. (2018) Skin-lightening creams are dangerous yet business is booming. Can the trade be stopped? The Guardian. From: https://www.

the guardian. com/world/2018/apr/23/skin-light ening-creams-are-dangerous-yet-business-is-booming-can-the-trade-be-stopped

- Kripke, S. (1980) Naming and Necessity Harvard University Press, USA.
- Kumar, V., Abbas, A., and Aster, J. (2015) Robbins and Cotran: Pathologic basis of disease 9<sup>th</sup> edition. Elsevier Saunders. Canada.
- Lawrenson, R., Town, I., Strasser, R., Strasser, S., McKimm, J., Tapsell, R., and Murray, N. (2017) The proposal for a third medical school in New Zealand: A community-engaged graduate entry medical program. *The New Zealand Medical Journal.* 130, 1453, pg., 63-69.
- Le, T., Bhushan, V., Sochat, M., and Chavda, Y. (2019) First aid for the USMLE step 1. McGraw Hill Education. USA.
- Lindley, R. (2011) Drug trials for older people The Journals of Gerontology 67, 2, pg., 152-157. From https://academic.oup.com/biomedgeronto logy/article/67A/2/152/554387
- Maoate, K., and Frizelle, F. (2013) Equity, education and health outcomes in Pacific peoples in New Zealand. The New Zealand Medical Journal. 126, 1376, pg., 6-8.
- Macfie, R. (2017) Outrageous fortune: what skyrocketing executive pay means for inequality. In The New Zealand Listener 11 May. From https://ww w.noted.co.nz/money/economy/outrageous-fortune-what-skyrocketing -executive-pay-means-for-inequality/
- Matheson, A., and Dew, K. (2008) Health, justice and politics. In Understanding health inequalities in Actearoa, New Zealand. Matheson, A. and Dew, K. (eds). Otago University Press, Wellington.
- McGee, M. (2012) Neurodiversity. *Contexts* 11, 3, pg., 12-13. From http://jo urnals.sagepub.com.ezproxy.waikato.ac.nz/doi/abs/10.1177/1536504

#### 212456175

- Meirion Thomas, J (2014) Why having so many women doctors is hurting the NHS: A provocative but powerful argument from a leading surgeon. Daily Mail From https://www.dailymail.co.uk/debate/article-25324
  61/Why-having-women-doctors-hurting-NHS-A-provovcative-power ful-argument-leading-surgeon.html
- Messner, S (2018) World of Warcraft's most controverisal plot twist has the community tearing itself apart. PC Gamer From:https://www.pcga mer.com/au/world-of-warcrafts-most-controversial-plot-twist-has-th e-community-tearing-itself-apart/
- Meyer-Rochow, V. (2009) Food taboos: their origins and purposes. Journal of Ethnobiology and Ethnomedicine 5, 18. From: https://www.ncbi.n lm.nih.gov/pmc/articles/PMC2711054/
- Mila, K. (2013) Only one deck. In Inequality: a New Zealand crisis, Rashbrooke, M (eds) Bridget Williams Books Limited, Wellington. pg., 91-104.
- Ministry of Health. (2013) Building a healthy New Zealand: Becoming a DHB board member. From http://www.moh.govt.nz/notebook/nbbooks.n sf/0/E323B8489D61B8F9CC257BC0007F3976/\$file/building-a-healt hy-new-zealand.pdf Ministry of Health, Wellington.
- Murphy, B. (2017) Patient or consumer? 9 thoughts on healthcare semantics. Becker's hospital review. From: https://www.beckershospitalreview. com/hospital-management-administration/patient-or-consumer-9-tho ughts-on-healthcare-semantics.html

Murphy, D. (2006) Psychiatry in the scientific image MIT Press, Cambridge

Nana, G. (2013) The Cost of inequality. In Inequality: a New Zealand crisis,

Rashbrooke, M (ed). Bridget Williams Books Limited, Wellington. pg., 55-56

- Nelson, D (2014) India's Supreme Court creates official third sex for eunuchs and transgenders. *The Telegraph*. From https://www.telegraph.co.u k/news/worldnews/asia/india/10767555/Indias-Supreme-Court-crea tes-official-third-sex-for-eunuchs-and-transgenders.html
- Parks, J., Wike, V. (2010) *Bioethics in a changing world* Prentice Hall, New Jersey.
- Parliament of New Zealand. (2018) Register of pecuniary and other specified interests of members of parliament: Summary of annual returns as at 31 January 2018. From https://www.parliament.nz/media/4798/sum mary-report-2018-final.pdf
- Pascal, B (1670) Pensées Trotter, W (trans) (1910) London.
- Pearl, R (2015) Are you a patient or a healthcare consumer? Forbes. From: https://www.forbes.com/sites/robertpearl/2015/10/15/are-you-a-pa tient-or-a-health-care-consumer-why-it-matters/#524d45ea2b4d
- Pierre, J. (2001) Faith or delusion? At the crossroads of religion and psychosis. Journal of Psychiatric Practice 3, 7 pg., 163-72. From: https://www. ncbi.nlm.nih.gov/pubmed/15990520
- Poole, P., Moriarty, H., Wearn, A., Wilkinson, T., and Weller, J. (2009) Medical student selection in New Zealand: Looking to the future. *The New Zealand Medical Journal*. 122, 1306, pg., 88-100. From http://www. nzmsj.com/uploads/3/1/8/4/31845897/7\_12nzmsj\_issue\_12.pdf
- Poole, P., Bourke, D., and Shulruf, B. (2010) Increasing medical students interest in general practice in New Zealand: Where to from here? The New Zealand Medical Journal. 123, 1315, pg., 12-20.

- Putnam, H. (1973) Meaning and Reference. Journal of Philosophy 70, pg., 699-711
- Putnam, H. (1975/1985) The meaning of "meaning". Philosophical Papers. Vol 2: Mind, Language, and Reality. Cambridge University Press.
- Rashbrooke, M. (ed) (2013) Inequality: A New Zealand crisis. Bridget Williams Books Limited, Wellington.
- Rawls, J. (1971) A theory of justice. Belknap Press. Cambridge, Massachusetts.
- Ritchey, T (2013) Wicked problems: Modelling social messes with morphological analysis. Acta Morphologica Generalis. 2, 1. Swedish Morphological Society. From http://www.swemorph.com/pdf/wp.pdf
- Sachin, J (2018) The type of consumerism healthcare really needs. Forbes. From: https://www.forbes.com/sites/sachinjain/2018/04/17/the-typ e-of-consumerism-healthcare-really-needs/#2e228a763c75
- Schmets, G and Rajan, D, Kadandale, S (eds.) (2016). Strategizing national health in the 21st century: a handbook. World Health Organisation, Geneva.
- Shih, J., Hodge, R., and Andrade-Navarro, M. (2015) Comparison of interand intraspecific variation in humans and fruit flies. *Genomics data*. 3, 49-54. From: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4 536057/
- Shorter, C., Crane, J., Pierse, N., Barnes, P., Kang, J., Wickens, K., Douwes, J., Stanley, T., Taubel, M., Hyvarinen, A., Howden-Chapman, P., and the Wellintgon Research Practitioner Research Network. (2018) Indoor visible mold and mold odor are associated with new-onset childhood wheeze in a dose-dependent manner. *Indoor air: International journal of indoor environment and health* from: https://onlinelibrary.

wiley.com/doi/full/10.1111/ina.12413

- Signal, L., Martin, J., Cram, F., and Robson, B. (2008) The Health Equity Assessment Tool: A User's Guide Wellington: Ministry of Health. From https://www.health.govt.nz/system/files/documents/publicati ons/health-equity-assessment-tool-guide.pdf
- Skapinker, M (2016) The seven excuses of highly paid chief executives. Financial Times. From: https://www.ft.com/content/02228292-b88f-11e6-961e-a1acd97f622d
- Skilling, P. (2013) Recent work in inequality: thoughts on audience, analysis, advocacy and the role of the academic with particular reference to Max Rahbrooke's (ed.) Inequality: A new Zealand crisis and Joseph Stiglitz's the price of inequality. New Zealand Sociology, 28, 3, pg., 67-80.
- Smith, A. (1759) The Wealth of Nations. From R, Campbell and Skinner, A., (eds) (1976) The Glasgow edition of the works and correspondence of Adam Smith, vol. 2a, Oxford. Clarendon Press.
- Sopoaga, F., and van der Meer, J. (2012) Investigating factors that influence success of Pacific students in first-year health sciences at university in New Zealand. *The New Zealand Medical Journal.* 125, 1352, pg., 28-38.
- Statistics New Zealand. (2018) Meshblock requirements http://archive.stat s.govt.nz/methods/classifications-and-standards/classification-relate d-stats-standards/meshblock/meshblock-require.aspx
- State Services Commission of the New Zealand Government. (2016) Senior pay report: Including chief executive remuneration disclosure 2015/16 From https://www.ssc.govt.nz/sites/all/files/senior-pay-report-2016. pdf

- Sun, J., and Yang, K. (2016) The wicked problem of climate change: A new approach based on social mess and fragmentation. *Sustainability.* 8, 1312. From: https://www.mdpi.com/2071-1050/8/12/1312
- Tan, Y (2016) Miss Fa'afafine: Behind samoa's 'third gender' beauty pageant. BBC News. From https://www.bbc.com/news/world-asia-37227803
- Taylor, I. (2013) Not in it for the money. In *Inequality: a New Zealand Crisis*, Rashbrooke, M (ed). Bridget Williams Books Limited, Wellington. pg., 18-19.
- TheGenieofLife (2016) Morally gray. Urban Dictionary From: https://www. urbandictionary.com/define.php?term=morally%20gray
- Towns, C., Watkins, N., Salter, A., Boyd, P., and Parkin, L. (2004) The Orewa Speech: Another threat to Māori health? *The New Zealand Medical Journal.* 117, 1205, pg., 1-7.
- Turnock, B (2012) Public health: what it is and why it works. 4<sup>th</sup> edition. Jones and Bartlett Learning. Chicago.
- United Nations. (UN) (1945) Charter of the united nations and statute of the international court of justice. San Francisco. From https://treaties.u n.org/doc/publication/ctc/uncharter.pdf
- United Nations. (UN) (2015) Transforming our world: The 2030 Agenda for Sustainable Development. From https://sustainabledevelopment .un.org/content/documents/21252030%20Agenda%20for%20Sustaina ble%20Development%20web.pdf
- University of Otago. (nd.) Division of Health Sciences Declaration and Police Vetting Forms. From https://www.otago.ac.nz/healthsciences/otago 683424.pdf

Vassar, L. (2015) How medical specialities vary by gender. American Medi-

cal Association From https://www.ama-assn.org/residents-students/ specialty-profiles/how-medical-specialties-vary-gender

- Wade, R. (2013) Inequality and the west. In Rashbrooke, M (ed) Inequality: a New Zealand Crisis Bridget Williams Books Limited, Wellington. pg., 39-52.
- Wagner, J., Joon-Ho, Y., Ifekwunigwe, J., Harrell, T., Bamshad, M., Royal, C. (2017) Anthropologists' views on race, ancestry, and genetics. American Journal of Physical Anthropology 162, 2, 318-327.
- Walters, L (2018) Fact Check: Disparities between Māori and Pākehā Stuff, National, Politics From: https://www.stuff.co.nz/national/politics/ 101231280/fact-check-disparities-between-mori-and-pkeh
- Webb., P., Bain, C., Page, A. (2017) Essential Epidemiology Cambridge University Press, Cambridge
- Wikler, D., and Marchand, S. (1998) Macro-allocation: dividing up the health care budget. In A companion to bioethics Kuhse, H., and Singer, P (eds). Blackwell Publishers, Cornwall. Chapter 30 pg., 306-315
- Wilson, I., Roberts, C., Flynn, E., and Griffin, B. (2012) Only the best: medical student selection in Australia. *Medical Journal of Australia* 196, 5, pg., 1-5.
- Witko, J., Boyles, P., Smiler, K., and McKee, R. (2017) Deaf New Zealand sign language users access to healthcare. The New Zealand Medical Journal. 130, 1466, pg., 53-61.
- World Bank. (2005) World development report 2006: Equity and development. Oxford University Press and Oxford World Bank, Washington. From http://documents.worldbank.org/curated/en/435331468127174 418/pdf/322040World0Development0Report02006.pdf

- World Health Organisation. (WHO) (n.d) Equity. From http://www.who.in t/healthsystems/topics/equity/en/
- World Health Organisation. (WHO) (1988) Guidelines for Healthy Housing. From http://apps.who.int/iris/bitstream/handle/10665/191555/EU RO\_EHS\_31\_eng.pdf;jsessionid=6A71B6C5747E8984C67112EED2D79 050?sequence=1
- World Health Organisation. (WHO) (2006) Basic documents, fourty-fifth edition, supplement, October. From http://www.who.int/governance/e b/who\_constitution\_en.pdf
- World Health Organisation. (WHO) (2013) WHO methods and data sources for global burden of disease estimates 2000-2011. From http://ww w.who.int/healthinfo/statistics/GlobalDALYmethods\_2000\_2011.pdf World Health Organisation, Geneva.
- World Health Organisation. (WHO) (2015) Global disability action plan 2014-2021 better health for all people with disability Fromhttp://apps.who.i nt/iris/bitstream/handle/10665/199544/9789241509619\_eng.pdf?seque nce=1
- World Health Organisation, Regional Office for South-East Asia. (2018) Sex Ratio. From http://www.searo.who.int/entity/health\_situation\_trend s/data/chi/sex-ratio/en/
- World Health Organisation. (WHO) (2018) World health statistics 2018: Monitoring health for the sustainable development goals. Geneva. From ht tp://apps.who.int/iris/bitstream/handle/10665/272596/978924156558 5-eng.pdf?ua=1
- Wubs, M., Bshary, R., Lehmann, L. (2016) Coevolution between positive reciprocity, punishment, and partner switching in repeated interactions. *Proceedings of Biological Science* 283, 1832 From: https://www.ncbi

.nlm.nih.gov/pmc/articles/PMC4920317/