

ANNA MCTAGGART

**IMMUNISATION AS PART OF THE CHILD'S RIGHT TO
HEALTH – EXAMINING IMMUNISATION IN NEW
ZEALAND IN THE CONTEXT OF ARTICLE 24 OF THE
CONVENTION ON THE RIGHTS OF THE CHILD**

LAWS 523

Submitted for the LLB (Honours) Degree

Faculty of Law

Victoria University of Wellington

2020

ABSTRACT

Article 24 of the Convention on the Rights of the Child (CRC) places a duty on the state to implement the child's right to the "enjoyment of the highest attainable standard of health". As a key preventative public health measure, immunisation arguably forms part of the child's right to health. However, under current New Zealand law, there is no obligation for parents to immunise their children, and due to coverage levels too low to consistently secure herd immunity, children are not adequately protected from preventable diseases. Unless determined to be Gillick competent, children under the age of 16 are presumed unable to provide medical consent, and this responsibility is instead placed on their parent or guardian. While parents have a right to make medical decisions on behalf of their children, the state has the power to act as an emergency brake to constrain the use of parental discretion. Based on New Zealand's domestic legal framework, and obligations under the CRC, the best interests standard and the harm threshold are relevant to a rights balancing exercise. Ultimately, state intervention may be justified on the basis of individual and collective rights to health. However, based on the state's obligations and practical issues with mandating immunisation, a mandatory immunisation programme should only be adopted if a comprehensive and targeted voluntary immunisation programme does not achieve the goal of establishing and maintaining herd immunity.

Key Words

Convention on the Rights of the Child – immunisation – right to health – medical consent

Table of Contents

I	INTRODUCTION	5
II	CHILDREN'S RIGHTS FRAMEWORK.....	6
A	Do Children Need Rights?	6
B	The United Nations Convention on the Rights of the Child	8
	1 Children's Rights Under the CRC	8
	2 Does the CRC Address Parent's Rights?	9
III	CHILDREN'S RIGHT TO HEALTH	10
A	Framework for the Right to Health	10
	1 Is the CRC Equipped to Mediate Between Parent's and Children's Rights?	11
B	Implementing the Right to Health.....	12
C	Immunisation as Part of the Child's Right to Health.....	13
D	Immunisation in New Zealand	15
	1 Legislation	16
	2 Case Law	16
E	Summary	18
IV	CONSENT TO MEDICAL TREATMENT	18
A	When do Children Have the Ability to Consent to Medical Treatment? ..	19
	1 New Zealand's Legal Framework.....	20
	2 Balancing Protection, Participation, and Developing Capacity ...	21
	3 Capacity to Consent to Immunisation	23
	4 Assessment of the Concept of Competency	24
B	What Happens When Parents Refuse Consent?	24
	1 The State as An Emergency Brake	25
	2 Standards for Intervention	26
	3 Standards for Intervention in New Zealand Law.....	27
V	BALANCING RIGHTS	29
VI	THE CLASH OF INDIVIDUALS: PARENTAL RIGHTS VS CHILDREN'S RIGHTS.....	30
A	Risk of Harm	30
B	Free-Riding in the Child's Best Interests	33
C	Freedom of Thought and Religion	35
VII	THE TENSION BETWEEN INDIVIDUAL AND COLLECTIVE RIGHTS: PUBLIC HEALTH IN A PANDEMIC	37
A	Public Health.....	37
B	Individual Versus Collective Rights.....	38
	1 Overriding Individual Rights	39
C	COVID-19 and Children's Rights.....	40
	1 What Kind of Threat Does COVID-19 Pose?	40
	2 Danger to Children and the Wider Community.....	41

	3	Efficacy and Sustainability of Other Measures	43
D		Summary	44
E		Competent Children	45
VIII		HOW SHOULD THE STATE IMPLEMENT THE CHILD'S RIGHT TO HEALTH?	46
A		The State's Responsibility	46
B		Practical Issues with Mandating Immunisation	48
	1	History of Forced Treatment for Indigenous and Disabled Communities	48
	2	Increased Vaccine Resistance	49
	3	Existing Inequities More of a Barrier than Vaccine Refusal.....	50
	4	Financial Penalties Would Likely Increase Inequities	51
	5	Summary	53
C		An Improved Voluntary Immunisation Programme	53
	1	Information and Engagement with Health Services	54
	2	Investing in Māori Research and Health Practitioners	56
IX		MANDATING IMMUNISATION	58
A		Evidence of Efficacy	58
B		Realistic Goals	59
C		Finding a Balance	60
	1	Linking Access to Services to Immunisation Status	60
	2	Allowing Non-medical Exemptions	61
	3	Mandating Immunisation During Outbreaks.....	63
D		Summary	63
X		CONCLUSION	64
XI		BIBLIOGRAPHY.....	66

I Introduction

Article 24 of the Convention on the Rights of the Child (CRC), places a duty on the state to implement the child's right to the "enjoyment of the highest attainable standard of health." This includes the right to be effectively protected from preventable diseases. As this essay will argue, for a child to truly enjoy the highest attainable standard of health, they must have access to the benefits provided by immunisation, because medical scientific-consensus suggests that this is the most effective form of disease-prevention.

However, whether children remain unimmunised due to active vaccine refusal, ambivalence, or barriers to access, the fact is that vaccine uptake in New Zealand consistently remains too low to protect the community, including children, from vaccine preventable diseases (VPDs). The 2019 measles epidemic, which infected thousands of people, was a stark reminder of the danger of VPDs, and was an event which should never have happened. The fact that children still face this danger, despite readily available vaccines, suggests that the child's right to health in New Zealand has not been fully realised.

This essay will argue that under the right to health, the state has a duty to ensure that, at a minimum, enough children are immunised to establish and maintain herd immunity. Accordingly, it will tackle two overarching questions regarding the child's right to health through the lens of immunisation. One, can mandatory immunisation be justified under the children's rights framework? Two, if it can be justified, does this necessarily mean that immunisation *should* be mandated, or is there a better way to implement the child's right to health in this context?

Section II will briefly discuss whether children need rights before outlining the children's rights framework. Section III will then focus on the right to health, anchoring immunisation as a key aspect of the child's right to health in modern New Zealand society, and discussing current New Zealand immunisation law. Section IV will move on to consider the issue of consent, examining who can consent to medical treatment, before discussing the standards for state intervention in parental decision-making.

Sections V-VII will discuss two sets of competing rights, examining whether state intervention would likely be justified on the basis of individual and collective rights to health. Section VIII will then consider whether it would be in the child's best interests to mandate immunisation, or if the state should instead seek to promote immunisation through voluntary means. Section IX will finally argue that if a voluntary programme fails to meaningfully increase immunisation uptake, then mandating immunisation may be necessary to effectively implement the child's right to health.

II Children's Rights Framework

The United Nations Convention on the Rights of the Child (CRC) defines children as "every human being below the age of eighteen years".¹ However, domestic legislation may grant children the legal status of adults at an earlier age for certain purposes.

In New Zealand, s 36 of the Care of Children Act 2004 allows children aged sixteen years and over to consent to or refuse consent to medical treatment as if they were of "full age".² In other words, even though are still children, sixteen and seventeen-year-olds have the same rights as adults for the purpose of medical consent. Accordingly, when this essay refers to children, it means children under the age of sixteen.

This section will discuss whether children need rights, before moving on to examine the children's rights framework, seeking to anchor the right to be protected from preventable diseases, and by extension, the right to be immunised, within this framework.

A Do Children Need Rights?

The idea that children can possess rights at all is a disputed concept. Some argue that rather than rights, children require protection.³ I will briefly explore these arguments before concluding that protection and rights are not incompatible.

¹ Convention on the Rights of the Child 1577 UNTS 3 (opened for signature 20 November 1989, entered into force 2 September 1990), art 1.

² Care of Children Act 2004, s 36(1).

³ Martha Minow "Rights for the Next Generation: A Feminist Approach to Children's Rights" (1986) 9 Harv Women's LJ 1 at 13-14.

There are several reasons why some people argue that children do not need rights. Firstly, children lack autonomy and are often dependent on their parents. Accordingly, they do not fit comfortably within the traditional autonomy model of rights.⁴ Secondly, some people perceive childhood as a time of innocence, where children are shielded from the hardships of adult life, and therefore do not require rights.⁵ Thirdly, others argue that the love and compassion parents feel towards their children provides better protection than rights.⁶ Finally, children are conceptually different to other marginalised groups, because childhood is transitory. To this end, Onora O'Neill states that the child's "main remedy is to grow up."⁷

However, it is possible for rights to sit on a foundation other than autonomy. The needs model of rights suggests that children's rights flow from the dependent nature of childhood, which places a duty on others to protect the child's interests.⁸ The reality is that children possess developing autonomy, while still needing protection, and both aspects may provide a foundation for rights.⁹ Moreover, parental compassion is no substitute for rights, because the interests of children and parents are not always aligned.¹⁰ Even parents with good intentions can harm their children. Growing up is not a suitable remedy, as some children may suffer irreparable harm which will seriously impact their adult lives. As Michael

⁴ Tamar Ezer "A Positive Right to Protection for Children" (2004) 7 Yale Hum Rts & Dev LJ 1 at 32-38; and Hamish Ross "Children's Rights and Theories of Rights" (2013) 21 Int J Child Rights 679 at 681-682.

⁵ John Holt *Escape from Childhood – The Needs and Rights of Children* (Hazell Watson & Viney Ltd, Aylesbury, 1975) at 22; and Michael Freeman "Taking Children's Rights More Seriously" (1992) 6 Int J Law Policy Family 52 at 56.

⁶ John Kleinig *Philosophical Issues in Education* (Biddles Ltd, Guilford and King's Lynn, 1982) at 207.

⁷ Onora O'Neill "Children's Rights and Children's Lives" (1992) 6 Intl JL & Fam 24 at 39.

⁸ Neil MacCormick "Rights in Legislation" in PMS Hacker and J Raz (eds) *Law, Morality, and Society: Essays in Honour of HLA Hart* (Clarendon Press, Oxford, 1977) 189 at 192; Ezer, above n 4, at 39; and Jonathan Montgomery "Children as Property" (1988) 51 Mod L Rev 323 at 341.

⁹ Ezer, above n 4, at 41.

¹⁰ Gary Melton "Children's Rights: Where Are the Children?" (1982) 52 Am J Orthopsychiatry 530 at 531-532.

Freeman argues, rights are important because they recognise the bearer is entitled to respect and can be used, even if on the child's behalf to secure remedies for wrongs.¹¹

B The United Nations Convention on the Rights of the Child

Children's rights are protected by several international human rights instruments, including the International Covenant on Civil and Political Rights (ICCPR), the Universal Declaration of Human Rights (UDHR) and the CRC. Of these instruments, the CRC is the most significant.

The CRC was adopted by the United Nations General Assembly (UN) on the 20th of November 1989. It was subsequently ratified by every country except the United States,¹² making it the most widely adopted international treaty in history. The CRC is legally binding on the states which have ratified it.¹³ States must report to the Committee on the Rights of the Child (the Committee) every five years explaining what measures they have taken to realise children's rights. The Committee reviews these reports and provides recommendations.¹⁴ While the CRC cannot force states to comply with the recommendations, it establishes international standards for children's rights and places pressure on states to implement measures to protect these rights.¹⁵

1 Children's Rights Under the CRC

In the early twentieth century, children were primarily viewed in terms of their vulnerability. However, the CRC shifted away from this approach, viewing children as

¹¹ Michael Freeman "Why it remains important to take Children's rights seriously" in Jonathan Rix, Melanie Nind, Kieron Sheehy and Katy Simmons (eds) *Equality, Participation and Inclusion 1: Diverse Perspectives* (Routledge, Abingdon, 2010) 99 at 102.

¹² Ezer, above n 4, at 24; and Sarah Mehta "There's Only One Country That Hasn't Ratified the Convention on Children's Rights: US" (20 November 2015) ACLU <aclu/org>.

¹³ Kirsten Sandberg "Children's Right to Protection under the CRC" in Asgeir Falch-Eriksen and Elisabeth Backe-Hansen (eds) *Human Rights in Child Protection: Implications for Professional Practice and Policy* (Palgrave Macmillan, Switzerland, 2018) 15 at 17; and Ezer, above n 4, at 24.

¹⁴ United Nations International Children's Emergency Fund "Implementing and monitoring the Convention on the Rights of the Child: Turning child rights principles into action and results for children" UNICEF <unicef.org>.

¹⁵ Jasper Krommendijk "The domestic effectiveness of international human rights monitoring in established democracies. The case of the UN human rights treaty bodies" (2015) 10 Rev Int Organ 489 at 505.

active rights holders, rather than “passive objects of protection”.¹⁶ This does not mean children do not need protection, but that children should be viewed first and foremost as rights holders rather than as recipients of adult benevolence.¹⁷ However, the age of the child will impact the way they exercise their rights and the kinds of protection they require. It will also influence the role of both parents and the state.

While all 54 articles of the CRC are equally important, the interpretation of the other rights are underpinned by four Guiding Principles. These principles are the right to non-discrimination (art 2), the child's best interests as a primary consideration (art 3), the right to life and development (art 6), and the right to be heard in matters which concern them (art 12).¹⁸

2 *Does the CRC Address Parent's Rights?*

When the term parent is used in this essay, it should be read to include other people who are legally responsible for a child without being biologically related to them, such as caregivers and guardians.

One of the reasons the United States has not ratified the CRC is the fear that it would grant children too much autonomy, would destroy parental rights, and would endanger family relationships.¹⁹ In reality the CRC emphasises the importance of the family,²⁰ especially in the preamble and arts 7, 8, and 9, indicating that an important part of protecting children's rights involves protecting the family unit, and parental authority, from unwarranted state interference. Because children's rights are largely facilitated by adults, typically their parents, the relationship between child and parent is crucial for the effective

¹⁶ Eugene Verhellen “The Convention on the Rights of the Child: Reflections from a historical, social policy and educational perspective” in Wouter Vandenhoe, Ellen Desmet, Didier Reynaert and Sara Lembrechts (eds) *Routledge International Handbook of Children's Rights Studies* (Routledge, London, 2015) 43 at 50.

¹⁷ Committee on the Rights of the Child *General Comment No. 7 (2005): Implementing child rights in early childhood* CRC/C/GC/7 (1 November 2005) at 8.

¹⁸ Jane Murray, Beth Blue Swadener and Kylie Smith (eds) *The Routledge International Handbook of Young Children's Rights* (Routledge, Oxon, 2020) at 6; and Tamar Morag “The Principles of the UN Convention on the Rights of the Child and Their Influence on Israeli Law” (2014) 22 *Mich State Int Law Rev* 531 at 535.

¹⁹ Lainie Rutkow and Joshua T Lozman “Suffer the Children: A Call for United States Ratification of the United States Convention on the Rights of the Child” (2006) 19 *Harv Hum Rts J* 161 at 179.

²⁰ Andrew Bainham *Children – The Modern Law* (3rd ed, Jordan Publishing Limited, Bristol, 2005) at 71.

exercise of that child's rights.²¹ The CRC does not seek to destroy the family, rather, it recognises that family relationships are important and should be protected.

There are also direct references to parental rights in arts 3, 5, and 18. The CRC explicitly states that parents or other legal guardians "have the primary responsibility for the upbringing and development of the child." The role of the state is not to step in to solve any minor disagreements between child and parent.²²

But, sometimes more serious disagreements will arise, and the state may be obliged to intervene. In some situations, justification of state intervention will be clear cut, such as instances of sexual abuse. However, in situations where the child's best interests are open to debate, it may be more difficult to determine whether intervention is justified. One context where this may become divisive is in the area of healthcare, in particular where parents refuse to allow their children to be immunised.

III Children's Right to Health

A Framework for the Right to Health

Before examining the state's ability to intervene in parental medical decision-making, it is necessary to ground this discussion in the theoretical framework of children's rights. Namely, what is the source of the right the state is seeking to protect through intervention.

Under art 24 of the CRC, children have a right to "the enjoyment of the highest attainable standard of health". The right to life, survival and development contained in art 6 is also relevant to the child's right to health, as is the right under art 3, to have their best interests as a primary consideration in any decision which affects them.

The right to health has far-reaching impacts on every aspect of life. Rights do not exist in a vacuum, and a child's health status can expand or limit their future options and ability to

²¹ Andrew Bainham, above n 20, at 72.

²² David M Smolin "Overcoming Religious Objections to the Convention on the Rights of the Child" (2006) 20 Emory Intl L Rev 81 at 96.

exercise their other rights.²³ Ill-health may result in developmental delays, impact the child's overall quality of life, limit their ability to enjoy rights to education and play,²⁴ and in severe cases may curtail their ability to grow into adulthood.

Because healthcare involves decision-making, the child's participation rights under art 12 are necessarily implicated, as is art 5, which discusses the evolving capacities of the child.

1 Is the CRC Equipped to Mediate Between Parent's and Children's Rights?

One issue with using a CRC-based rights assessment framework is that it is debatable whether the CRC was envisaged as a tool to mediate between children's and parent's rights in this way. The CRC creates an international legal framework which places an obligation on ratifying states to protect and implement a set of children's rights.²⁵ As a result, the CRC hinges on state's conduct.

While appropriate vs inappropriate parental conduct is clearly considered, this is mainly in the context of when the state would be justified in intervening in the parent-child relationship. For example, while the CRC references parental conduct in the context of protecting children from abuse,²⁶ the focus is on the state's obligation to protect the child, rather than the parent's conduct per se.

Many of the rights articulated in the CRC are framed in a way that imagines conflict involving the parent and the child united against the state. As a result, there is an emphasis on limiting the state's ability to interfere in the family unit.²⁷ Article 24 is phrased in a way that suggests a situation where the state has curtailed the right to health by failing to provide

²³ United Nations Office of the High Commissioner for Human Rights *Fact Sheet No. 31, The Right to Health* (United Nations, Geneva, 2008) at 6.

²⁴ Ursula Kilkelly "The Health Rights of Children" in Jonathan Todres and Shani M King (eds) *The Oxford Handbook of Children's Rights Law* (Oxford University Press, United States, 2020) at 369.

²⁵ United Nations International Children's Emergency Fund "What is the Convention on the Rights of the Child?" UNICEF <unicef.org>; and Lisa Pilnik "The United Nations Convention on the Rights of the Child and its Implication in Japan and Sweden" (2006) 3 J Intl L & Policy 5:1 at 5:3.

²⁶ Convention on the Rights of the Child, above n 1, art 19.

²⁷ At arts 3, 5, 7, 8 and 9.

appropriate services, as opposed to a situation where a parent refuses to allow their child to partake of an available service.

The CRC also states that the child's best interests will be their parent's primary consideration,²⁸ which at first glance seems to neglect the fact that parents do not always act in their children's best interests due to diverging interests. However, in General Comment no. 14, the Committee does acknowledge the fact that the child's best interests may clash with those of their parents. It also provides guidance on how to address such a clash by balancing the interests of all parties.²⁹

The CRC also places some limitations on parental rights. It states that the rights of parents are legitimately exercised when done so in a manner "consistent with the evolving capacities of the child".³⁰ This limitation indicates the CRC imagines a correct way for parental rights to be exercised and acknowledges that state intervention may be necessary.

While the CRC may not be perfectly tailored to mediate rights conflicts between children and parents, this ability is somewhat fleshed out by the general comments and it is the best tool currently available. However, it could certainly be clearer, and it may be time to update our international standards to better accommodate the idea of conflicting parent-child rights.

B Implementing the Right to Health

While parents and caregivers have the day-to-day responsibility for caring for children, art 4 of the CRC places the responsibility for implementing and enforcing rights through all appropriate measures on the state. Article 24 emphasises that the state is responsible for ensuring no child is deprived of his or her health rights. In the context of health rights, it is

²⁸ Convention on the Rights of the Child, above n 1, art 18.

²⁹ Committee on the Rights of the Child *General Comment No. 14 (2013) on the rights of the child to have his or her best interests taken as a primary consideration (art. 3, para 1)* CRC/C/GC/14 (29 May 2013) at [39].

³⁰ Convention on the Rights of the Child, above n 1, art 5.

not enough to simply provide services, the state must do so in a way that does not discriminate and must ensure all children are able to access health care services.³¹

C Immunisation as Part of the Child's Right to Health

Despite the existence of strong scientific evidence corroborating the benefits of immunisation,³² a small but significant percentage of parents refuse to allow their children to be vaccinated, despite having no medical reason for doing so. This raises the question, if a child is denied access to immunisation without a medical reason, is this a violation of their right to health?

Protecting children from disease is clearly part of the child's right to health. Article 24(f) of the CRC emphasises that developing preventive healthcare is an important part of this right. Arguably, the most effective way to secure the child's right to health in this context is through immunisation.

Immunisation is a method of inoculating humans against disease,³³ and refers to the process of receiving the vaccine and becoming immune to the disease.³⁴ According to generally accepted scientific findings, vaccines work by inducing "an immunological memory against specific diseases, so that if exposure to a disease-causing pathogen occurs, the immune response will neutralise the infection".³⁵ Once immunisation rates of around

³¹ Committee on the Rights of the Child *General Comment No. 15 (2013) on the right of the child to the enjoyment of the highest attainable standard of health (art. 24)* CRC/C/GC/15 (17 April 2013) at [8]-[11].

³² While this is a legal essay, it will outline generally accepted scientific findings. See Sander L van der Linden, Chris E Clarke and Edward W Maibach "Highlighting consensus among medical scientists increases public support for vaccines: evidence from a randomized experiment" (2015) 15 *BCM Public Health* at 1-5; and Mark Doherty, Philippe Buchy, Baudouin Standaert, Carlo Giaquinto and David Prado-Cohrs "Vaccine impact: Benefits for human health" (2016) 34 *Vaccine* 6709 at 6707-6708.

³³ Andrzej Grzybowski, Rafal K Patryn, Jroslaw Sak and Anna Zagaia "Vaccination refusal. Autonomy and permitted coercion" (2017) 111 *Pathog Glob Health* 200 at 200.

³⁴ Kristina Duda "What is the Difference Between Immunization and Vaccination" (updated on December 3, 2019) Very Well Health <verywellhealth.com>; and Health Direct "Immunisation or vaccination – what's the difference?" (April 2019) <healthdirect.gov.au>.

³⁵ Ministry of Health *Immunisation Handbook 2017* (2nd ed, Ministry of Health, Wellington, 2018) at 16.

90-95% are reached the phenomenon of herd immunity protects people who cannot be immunised.³⁶

There is medical consensus that immunisation is a safe and effective measure of preventing disease outbreaks and is one of the most important and cost-effective public health tools available.³⁷ Vaccines prevent millions of deaths per year,³⁸ and may have saved tens of millions of lives in the last few decades alone.³⁹ Immunisation programmes have significantly reduced the infection rates of many dangerous childhood diseases, including measles and polio,⁴⁰ and smallpox has been completely eradicated.⁴¹

The efficacy of the measles, mumps, and rubella (MMR) vaccine highlights the protection immunisation offers children. 99% of the people who receive two doses of the vaccine will become immune to measles and are typically protected for life.⁴² In comparison, if

³⁶ Jackie K Olive and Kirstin RW Matthews *How Too Much Freedom of Choice Endangers Public Health: The Effect of Nonmedical Exemptions from School-Entry Vaccinations in Texas* (Rice University's Baker Institute, Texas, 2016) at 2.

³⁷ D Isaacs, HA Kilham and H Marshall "Should routine childhood immunizations be compulsory" (2004)

40 J Paediatr Child Health 392 at 392; Doherty, above n 32, at 6707; Kristin Lunz Trujillo, Matthew Motta, Timothy Callaghan and Steven Sylvester "Correcting Misperceptions about the MMR Vaccine: Using Psychological Risk Factors to Inform Targeted Communication Strategies" (2020) Political Res Q 1 at 1; Roland Pierik "Mandatory Vaccination: An Unqualified Defence" (2018) 35 J Appl Philos 381 at 383; and Alberto Giubilini, Thomas Douglas and Julian Savulescu "The moral obligation to be vaccinated: utilitarianism, contractualism, and collective easy rescue" (2018) 21 Med Health Care Philos 547 at 547.

³⁸ United Nations International Children's Emergency Fund *For Every Child, Every Right: The Convention on the Rights of the Child at a crossroads* (UNICEF, New York, 2019) at 20; and James Lobo "Vindicating the Vaccine: Injecting Strength into Mandatory School Vaccination requirements to Safeguard the Public Health" (2016) 57 BCL Rev 261 at 269.

³⁹ Sarah Tickner, Patrick J Leman and Alison Woodcock "Factors underlying suboptimal childhood immunization" (2006) 24 Vaccine 7030 at 7030.

⁴⁰ Steffan Mueller, Daniel J Exeter, Helen Petousis-Harris, David O'Sullivan and Christoph D Buck "Measuring disparities in immunization coverage among children in New Zealand" (2012) 18 Health Place 1217 at 1217.

⁴¹ Robin A Weiss and Jose Esparza "The prevention and eradication of smallpox: a commentary on Sloane (1755) 'An account of inoculation'" (2015) 370 Philos Trans R Soc B at 4; and Walter A Orenstein and Rafi Ahmed "Simply put: Vaccination saves lives" (2017) 114 PNAS 4031 at 4031.

⁴² Johan Christiaan Bester "Measles Vaccination is Best for Children: The Argument for Relying on Herd Immunity Fails" (2017) 14 J Bioeth Inqu 375 at 378.

someone who is unimmunised encounters a person infected with measles, their chance of contracting the disease is almost 100%.⁴³

Contracting a vaccine-preventable disease places the child at risk of negative outcomes ranging from significant discomfort to irreparable harm and even death.⁴⁴ Moreover, their immunisation status may also impact the health rights of children as a class because, if infected, the child becomes a vector for disease.⁴⁵

The availability of vaccines means that infection and its subsequent harms are almost completely avoidable. Accordingly, it seems clear that immunisation is relevant to the child's right to health and that access to vaccines forms a key part of the "highest attainable standard of health".

Overall, if an unimmunised child in New Zealand contracts or is at risk of contracting a preventable disease for which an overall safe and effective vaccine is available, and they have no medical reason for being unable to receive that vaccine, their right to health under the CRC has been curtailed.

D Immunisation in New Zealand

The Ministry of Health's immunisation coverage target is for 95% of children to be fully vaccinated by the age of eight months.⁴⁶ However, as of June 2020, this goal has not been met,⁴⁷ and despite the fact that childhood vaccines on the National Immunisation Schedule are free of charge to applicable age groups,⁴⁸ levels are not high enough to consistently

⁴³ European Centre for Disease Prevention and Control "Factsheet about measles" ECDC <ecdc.europa.eu>.

⁴⁴ Tom Sorell "Parental Choice and Expert Knowledge in the Debate about MMR and Autism" in Angus Dawson and Marcel Verweij (eds) *Ethics, Prevention, and Public Health* (Oxford University Press, New York, 2007) 93 at 98.

⁴⁵ Margaret P Battin, Leslie P Francis, Jay A Jacobson and Charles B Smith *The Patient as Victim and Vector: Ethics and Infectious Disease* (Oxford University Press, New York, 2009) at 31.

⁴⁶ Ministry of Health "Health targets: Increased immunisation" (10 August 2018) Ministry of Health <health.govt.nz>.

⁴⁷ Ministry of Health "National and DHB immunisation data" (16 July 2020) Ministry of Health <health.govt.nz>.

⁴⁸ Ministry of Health, above n 35, at 13.

support herd immunity.⁴⁹ These less than optimal immunisation rates suggest that the child's right to health in New Zealand is not being fully realised.

1 Legislation

In New Zealand, parents are not required by law to vaccinate their children. The only legal instrument which focuses on immunisation is the Health (Immunisation) Regulations 1995.⁵⁰ The purpose of the Regulations is to gather information to facilitate disease control, to promote the immunisation of children, and to encourage informed choices regarding immunisation.⁵¹ The Regulations require early childhood centres and primary schools to obtain information about a child's immunisation status from their caregivers. However, a child's enrolment and attendance are not affected by a refusal to provide a certificate,⁵² except potentially in the case of an outbreak when unimmunised children may temporarily be excluded from the centre or school for their own safety.⁵³

The immunisation status of children born from 2005 is stored in the National Immunisation Register (NIR) and can be accessed by authorised health professionals. This enables health professionals to follow up on children who are not immunised and creates regional and national data on immunisation coverage, providing warning of which areas might be in danger of an outbreak.⁵⁴

2 Case Law

While there is no legal requirement to immunise children in New Zealand, case law shows the courts are willing to order immunisation in certain situations, and when immunisation

⁴⁹ Mary Nowlan, Esther Willing and Nikki Turner "Influences and policies that affect immunisation coverage – a summary review of literature" (2019) 132 NZMJ 79 at 80.

⁵⁰ Jessica Kerr "Immunisation and the Law. Slippery Slope to a Health Society" (2006) 37 VUWLR 93 at 101.

⁵¹ Health (Immunisation) Regulations 1995, reg 1.

⁵² At reg 12.

⁵³ Ministry of Health *Immunisation Guidelines: for Early Childhood Services and Primary Schools* (Ministry of Health, New Zealand, 2020) at 10.

⁵⁴ Ministry of Health "National Immunisation Register" (12 August 2015) Ministry of Health <health.govt.nz>.

cases come before the court, immunisation is usually determined to be in the child's best interests.

In *Capital and Coast District Health Board v DRB*, Whitehead J ruled in favour of vaccination because the child in question was at direct risk of contracting Hepatitis-B from his mother through breast feeding.⁵⁵ In *Re SPO*, the child was already in the custody of the Chief Executive of what was then the Child Youth and Family Service, meaning his decision to be vaccinated was supported by a guardian.⁵⁶ Ullrich J also determined the child was Gillick competent. *Alex Stone v Sophie Reader* involved a parental dispute over vaccination, where the court sided with the parent who wished to vaccinate on the basis that it was in the child's best interests.⁵⁷

Each case involved an investigation of the individual child and their specific circumstances and at least one guardian consented to immunisation. It is also clear the judges did not turn their minds to whether vaccination was in the best interests of children as a group. In the English case *Re B (A Child: Immunisation)*, Bellamy J stated:⁵⁸

I make it clear that my judgement is not a commentary on whether immunisation is a good or a bad thing generally. I am not saying anything about the merits of vaccination more widely.

Therefore, case law does not provide a general basis for intervening in decisions not to immunise. Currently, it is well within a parent's rights to refuse to allow their child to be vaccinated, and intervention is only likely if the child is in imminent danger of contracting a disease, the child is determined to be competent to make their own decision, the child is already under guardianship of the state, or if at least one guardian consents to immunisation.

⁵⁵ *Capital and Coast District Health Board v DRB* FAM-2010-085-000595, 26 May 2010.

⁵⁶ *Re SPO* FC Wellington FAM-2004-085-1046, 3 November 2005.

⁵⁷ *Alex Stone v Sophie Reader* [2016] NZFC 6130 at [21].

⁵⁸ *Re B (A Child: Immunisation)* [2018] EWFC 56 at [93].

E Summary

This section has argued that access to immunisation is relevant to the child's right to health in New Zealand. Section IV will discuss why parents are in a position to refuse immunisation on their child's behalf and will examine standards for intervention by the state.

IV Consent to Medical Treatment

One of the key factors which may affect the state's ability to implement the child's right to health in the context of immunisation is the issue of consent, and who is permitted to provide it. Before a child can be immunised, someone must give medical consent. The requirement that health practitioners obtain a patient's informed consent to a medical procedure is a cornerstone of modern medicine.⁵⁹ The Code of Health and Disability Services Consumer's Rights 1996 (the Code), outlines the duties New Zealand health providers owe their patients. Unless otherwise permitted by law, they cannot treat a patient without informed consent.⁶⁰ They must also facilitate the patient's ability to provide informed consent through effective communication and accurate explanation of information relevant to the patient's condition.⁶¹ The right to consent also includes the right to refuse consent.⁶²

However, most children are not considered capable of providing their own consent to medical treatment. Instead, this responsibility is placed in the hands of a parent or guardian.⁶³ While adults have the right to refuse treatment on their own behalf, refusal on the behalf of a child may be more controversial. This section will discuss children's ability

⁵⁹ Daniel E Hall, Allan V Prochazka and Aaron S Fink "Informed consent for clinical treatment" (2012) 184 CMAJ 533 at 533.

⁶⁰ Health and Disability Commissioner (Code of Health and Disability Services Consumer's Rights) Regulations 1996, sch 2, right 7(1).

⁶¹ At sch 2.

⁶² New Zealand Bill of Rights Act 1990, s 11.

⁶³ Care of Children Act, above n 2, at s 16; and F M Hodges, J S Svoboda and R S Howe "Prophylactic Interventions on Children: Balancing Human Rights with Public Health" (2002) 28 J Med Ethics 10 at 11.

to consent in general before examining the standard for challenging parental refusal of consent.

A When do Children Have the Ability to Consent to Medical Treatment?

The duty to obtain consent is rooted in the idea that humans have an inherent moral status based on their right to autonomy, self-determination, and bodily integrity.⁶⁴ Autonomy and freedom from interference are among the first rights to be articulated by Immanuel Kant.⁶⁵ However, children are often denied the right to act autonomously.⁶⁶

Childhood is a transitional period, but one which has an enormous impact on later life. This period is conceptualised in different ways. Some choose to focus on elements of vulnerability and incomplete development, viewing children as ‘becomings’. They are future adults. “Blank slates” who lack the ability and knowledge required to exercise autonomy.⁶⁷ Others view children as “beings”; social actors who influence the lives of those around them and are active agents in the construction of their own lives.⁶⁸ If a child is viewed as a “becoming”, it may be easier to justify denying self-determination in the context of healthcare decisions in order to protect the interests of the future adult.

Arguably, neither view is complete on its own. It is possible to view a child as both an active social actor (a being) and someone who needs special protection (a becoming).⁶⁹ This interpretation is consistent with the CRC, which includes both protection and

⁶⁴ Lucy Thomson “Whose Right to Choose – A Competent Child’s Right to Consent to and Refuse Medical Treatment in New Zealand” (2001) 8 Canterbury L Rev 145 at 146-147; and Alicia Ouellette “Shaping Parental Authority over Children’s Bodies” (2010) 85 Ind LJ 955 at 978.

⁶⁵ Priscilla Alderson and Mary Goodwin “Contradictions within concepts of children’s competence” (1993) Intl J Child Rts 303 at 308.

⁶⁶ Michael Koelch and Joerg M Fegert “Ethics in child and adolescent psychiatric care: An international perspective” (2010) 22 Int Rev Psychiatry 258 at 258.

⁶⁷ Florian Esser, Meike S Baader, Tanja Betz and Beatrice Hungerland *Reconceptualising agency and childhood: New Perspectives in childhood studies* (Routledge, London, 2016) at 140; and Jingyi Huang “Beings and Becoming: The Implication of Different Conceptualizations of Children and Childhood in Education” (2019) 10 CJNSE 99 at 99-100.

⁶⁸ Emma Uprichard “Children and ‘Being and Becomings’: Children, Childhood and Temporality” (2008) 22 Child Soc 303 at 304; and Allison James and Alan Prout *Constructing and Reconstructing Childhood: Contemporary Issues in the Sociological Study of Childhood* (Routledge, London, 1997) at 8.

⁶⁹ Uprichard, above n 68, at 306; Huang, above n 67, at 101.

participation rights.⁷⁰ Depending on their age and maturity, a child may lack the ability, or the experience needed to fully understand the implications of a certain decision. In some cases, it will be in the child's best interests if their short-term autonomy is limited in order to preserve their long-term autonomy and open pathways.⁷¹ Protecting a child from the pressure of having to make a difficult decision they are not yet equipped for may also be in their best interests.⁷²

1 New Zealand's Legal Framework

In New Zealand, children under the age of 16 are presumed to be unable to consent to medical treatment.⁷³ This presumption may be rebutted under the common law if the child meets what is known as "Gillick competency".⁷⁴ In the English case of *Gillick*, a majority in the House of Lords ruled that if a child under the age of 16 possessed sufficient intelligence to understand the nature and implications of a proposed treatment they would be able to provide consent.⁷⁵ The application of the Gillick principle in New Zealand has been confirmed in the Family Court,⁷⁶ and the High Court.⁷⁷ According to guidance from the Medical Council of New Zealand, it is the responsibility of the health professional providing treatment to assess the child's competence and decide whether they are able to give informed consent.⁷⁸

⁷⁰ Michael Freeman "The Value and Values of Children's Rights" in Antonella Invernizzi (ed) *The Human Rights of Children: From Visions to Implementation* (Routledge, Oxon, 2016) 36 at 41.

⁷¹ Aviva L Katz and Sally A Webb "Informed Consent in Decision-Making in Pediatric Practice" (2016) 138 *Pediatrics* at 12.

⁷² Melton, above n 10, at 533.

⁷³ Care of Children Act, above n 2, at s 36.

⁷⁴ Chantelle Murley "Does the Gillick competency test apply in New Zealand, given the special nature of sexual health care services?" (2013) 1 *PILJNZ* 92.

⁷⁵ *Gillick v West Norfolk and Wisbech Area Health Authority and another* [1985] 3 *WLR* 830 (HL); and Richard Griffith "What is Gillick competence?" (2016) 12 *Hum Vaccin Immunother* 244 at 244.

⁷⁶ *Re SPO*, above n 56, at [27].

⁷⁷ *Moore v Moore*, [2014] *NZHC* 3213, [2015] 2 *NZLR* 787 at [136]; and *Re SPO*, above n 56, at [25].

⁷⁸ Medical Council of New Zealand *Information, choice of treatment and informed consent* (Medical Council of New Zealand, Wellington 2019) at [33]; and Fiona Miller "Wake up COCA! Give children the right to consent to medical treatment" (2011) *NZFLJ* 85 at 86.

2 *Balancing Protection, Participation, and Developing Capacity*

The desire to protect the child's future autonomy must be considered in light of their right to participation and evolving capacity. Much will depend on the age and abilities of the particular child and the nature of the decision being made. Regardless of age, all children hold participation rights and must be encouraged to participate in medical decisions to the extent of their capacities.⁷⁹ The decision-maker is permitted to consider the child's age and maturity when deciding how much weight to give their views.⁸⁰ However, this right must be taken seriously, and a child's views should not be viewed as "tokenistic", or dismissed merely because the child is very young, or their opinion is inconvenient.⁸¹

Information is vital to effective participation.⁸² Priscilla Alderson and Jonathan Montgomery suggest that children's 'ignorance' is often due to a lack of information and opportunities, rather than their age.⁸³ In order for a child to participate in or be found competent to make a medical decision they must be provided with information necessary to form a perspective on the situation.⁸⁴ Even an adult would likely lack the knowledge and understanding necessary to make a healthcare decision unless the factors involved and the various outcomes were explained to them in terms they could comprehend.⁸⁵ It is

⁷⁹ Jane Fortin *Children's Rights and the Developing Law* (2nd ed, Cambridge University Press, Cambridge, 2005) at 76.

⁸⁰ Committee on the Rights of the Child *General Comment No. 20 (2016) on the implementation of the rights of the child during adolescence* CRC/C/GC/20 (6 December 2016) at [22]-[23].

⁸¹ Laura Lundy "'Voice' is not enough: conceptualising Article 12 of the United Nations Convention on the Rights of the Child" (2007) 33 Br Educ Res J 927 at 929; and Laura Lundy "Implementing the Rights of Young Children – An assessment of the impact of General Comment No. 7 on law and policy on a global scale" in Jane Murray, Beth Blue Swadener and Kylie Smith (eds) *The Routledge International Handbook of Young Children's Rights* (Routledge, Oxon, 2020) at 22-24.

⁸² Patrick Parkinson and Judith Cashmore "Children's Participation in Decisions about Parenting Arrangements" in James G Dwyer (ed) *The Oxford Handbook of Children and the Law* (Oxford University Press, New York, 2019) 834 at 835.

⁸³ Priscilla Alderson and Jonathan Montgomery *Health Care Choices: making decisions with children* (Institute of Public Policy Research, London, 1996) at 6-7.

⁸⁴ Philip Recordon "Consent Issues: Intellectual Disability, Mental Illness and Children" in Rebecca Keenan *Health Care and the Law* (5th ed, Thomson Reuters, Wellington, 2016) at 168.

⁸⁵ Paquita de Zulueta "Choosing for and with children: consent, assent and working with children in the primary care setting" (2010) 3 Lon J Prim Care 12 at 14.

important that information is presented in an accessible manner and the treatment is explained using child-friendly language.

The facilitation of active participation has many benefits. It may result in greater trust between doctor and patient,⁸⁶ the efficacy of and compliance with the treatment may increase,⁸⁷ and the child's development will be aided.⁸⁸ Ignoring a child can lead to disempowerment and the child's belief that their views are irrelevant. The child's views, desires, and concerns are of extreme value to the process and may be permanently lost if participation rights are not upheld.⁸⁹ It has been suggested that even if the child is unable to make ultimate treatment decisions, they should be given as much control over the situation as possible.⁹⁰ This might include asking a child which arm they want a vaccine to be injected into.

As children mature, the state is still obliged to provide protection, however the focus shifts towards protecting the child's agency. As a child's capacities increase, so does their ability to exercise autonomy.⁹¹ The Committee has stated that "an adult's judgement of a child's best interests cannot override the obligation to respect all the [child's] rights under the Convention."⁹² Hein et al postulate the age at which most children are competent to provide consent is 12 years of age, much lower than New Zealand's current statutory age of medical consent.⁹³

⁸⁶ Zulueta, above n 85, at 14.

⁸⁷ Priscilla Alderson "Consent to Children's Surgery and Intensive Medical Treatment" (1990) 17 J Law Soc 52 at 58

⁸⁸ Melton, above n 10, at 533; and Michael Freeman "The Best Interests of the Child? Is *The Best Interests of the Child* in the Best Interests of Children?" (1997) 11 Int J Law Pol Fam 360 at 367.

⁸⁹ Zulueta, above n 85, at 14.

⁹⁰ Katz and Webb, above n 71, at 58

⁹¹ Committee on the Rights of the Child, above n 80, at [18]; and Bruce Abramson "The Invisibility of Children and Adolescents" in Eugene Verhellen (ed) *Monitoring Children's Rights* (Martinus Nijhoff Publishers, Netherlands, 1996) 393 at 399.

⁹² Committee on the Rights of the Child *General Comment No. 13 (2011): The right of the child to freedom from all forms of violence* CRC/C/GC/13 (18 April 2011) at [61].

⁹³ Irman M Hein, Martine C De Vries, Pieter W Troost, Gerhen Meynen, Johannes B Van Goudoever and Ramón J L Lindauer "Informed consent instead of assent is appropriate in children from the age of twelve: Policy implications of new findings on children's competence to clinical research" (2015) 15 BMC Med Ethics at 6.

There is scientific evidence indicating that children have decreased decision-making capacities and lack impulse control.⁹⁴ However, the context the decision is made in is very important. It is possible that a child may be less competent to make a sensible decision in the heat of the moment while still being capable of making medical decisions in a controlled environment, when presented with relevant information and given time to process.⁹⁵ A child may also be competent to make some medical decisions but not others.⁹⁶ If a treatment is particularly dangerous or complicated, a higher level of understanding may be necessary to find competence.⁹⁷

3 *Capacity to Consent to Immunisation*

Immunisations do carry some degree of risk, but no medical treatment is completely risk free. Overall, the scientific literature indicates that the danger posed by vaccines is very small.⁹⁸ Administering a vaccine is a very short, simple procedure which would be easy to explain to a child. It does involve some invasion of bodily integrity and can be painful. However, the procedure itself is relatively non-intrusive compared to other medical interventions.

Because it is a well-established treatment, with very low risks compared to its high rewards, it may be easier to determine that a child is competent to consent to a routine immunisation, than to a major surgery. However, in order to find competency, the child would still need

⁹⁴ Laurence Steinberg "Adolescent Development and Juvenile Justice" (2009) 5 *Annu Rev Clin Psychol* 47 at 55-56.

⁹⁵ Petronella Grootens-Wiegers, Irma M Hein, Jos M van den Broek and Martine C de Vries "Medical decision-making in children and adolescents: developmental and neuroscientific aspects" (2017) 17 *BMC Pediatrics* at 8; and Commissioner for Children Tasmania *Involving children in decision making – Your quick, practical guide* (Commissioner for Children, Tasmania, 2016) at 9.

⁹⁶ Kathryn McLean "Children and Competence to Consent: Gillick Guiding Medical Treatment in New Zealand" (2000) 31 *VUWLR* 551 at 557; and Recordon, above n 84, at 167-168.

⁹⁷ Rony E Duncan and Susan M Sawyer "Respecting Adolescent's Autonomy (as Long as They Make the Right Choice)" 47 *J Adolesc Health* 113 at 114; Irma M Hein, Pieter W Troost, Alice Broersma, Martine C de Vries, Joost G Daams and Ramón J L Lindaur "Why is it hard to make progress in assessing children's decision-making competence?" (2015) 16 *BMC Med Ethics* at 4; and James F Drane "The Many Faces of Competency" (1985) 15 *Hastings Cent Rep* 17 at 18.

⁹⁸ Sarah Geoghegan, Kevin P O'Callaghan and Paul A Offit "Vaccine Safety: Myths and Misinformation" (2020) 11 *Front Microbiol* at 1; and Sander van der Linden "Why doctors should convey the medical consensus on vaccine safety" (2016) 21 *Evid Based Med* 119 at 119.

to be able to understand the process and purpose of immunisation and then be able to conduct a risk assessment analysis before reaching a decision.

4 Assessment of the Concept of Competency

It is important to acknowledge that the assessment of a child's competency may be value laden. Research has shown that a child is more likely to be found competent if their decision conforms with the decision-maker's own views of the child's best interests.⁹⁹ This means that children may often be assessed on the outcome of their decision, rather than the process used to reach it.¹⁰⁰ Unless some kind of objective, standardised test is used to assess competence, there is a danger that the child's right to exercise their developing capacity will be curtailed because their views do not align with the decision-maker's own values.¹⁰¹

The concept of competency itself is flawed. Despite the presumption adults can consent to medical treatment while children cannot, children may be more competent to make informed decisions than some adults. However, children are vulnerable and require extra protection. Perhaps, establishing an age of consent and allowing exceptions based on individual assessment is the best compromise that exists between the sometimes-competing rights to protection, participation and developing capacities.

B What Happens When Parents Refuse Consent?

Even with an individual assessment, some children will not be able to provide consent, meaning their parents must provide consent on their behalf. Most decisions about children's health care are uncontroversial and will be successfully navigated through cooperation between medical practitioner, parent, and child. However, in some situations, the medical practitioner and the parent will disagree. In such cases, the question becomes, where do we draw the line between legitimate uses of parental discretion and situations where the state has a duty to intervene on the child's behalf?

⁹⁹ Alderson and Goodwin, above n 65, at 306.

¹⁰⁰ Hein et al, above n 93, at 5; and Duncan and Sawyer, above n 97, at 114.

¹⁰¹ At 4.

1 *The State as An Emergency Brake*

Parents are responsible for their child's upbringing and are free to raise their child according to their own idea of "the good life" without state interference.¹⁰² This includes making medical decisions on their child's behalf.¹⁰³ Parents are often better qualified than an outside party to determine their child's best interests, because they possess special knowledge of the child.¹⁰⁴ However, parental rights are not absolute.¹⁰⁵ Children are not their parent's property.¹⁰⁶ Instead the parent-child relationship can be viewed as analogous to a fiduciary duty. Due to the power they hold over their child's formative years, parents are obliged to act in their child's best interests.¹⁰⁷

When the parental right to make healthcare decisions for their child infringes the child's right to health (or another right) the state has the power to act as an "emergency brake" to constrain the use of parental discretion.¹⁰⁸ The doctrine of *parens patriae* recognises the state has a duty to protect its most vulnerable members.¹⁰⁹ This is especially relevant when a parent chooses to refuse treatment against the advice of medical practitioners. There are many factors which may contribute to an assessment of whether the state should intervene. For example, refusal of consent may be easier to justify if treatment has a very low chance of success or is highly experimental as opposed to a well-established treatment with a high chance of success.¹¹⁰

¹⁰² Pierik, above n 37, at 385.

¹⁰³ Ouellette, above n 64, at 967.

¹⁰⁴ Robin S Downie and Fiona Randall "Parenting and the Best Interests of Minors" (1997) 22 J Med Philos 219 at 223; and Roland Pierik "Vaccination Policies: Between Best and Basic interests of the child, between Precaution and Proportionality" (2020) Public Health Ethics 1 at 3.

¹⁰⁵ Jennifer Schweppe "Best to Agree to Disagree? Parental Discord, Children's Rights and the Question of Immunization" (2008) 37 CLWR 147 at 147.

¹⁰⁶ Jade Michelle Ferguson "Children under the Knife: Current Interests, Future interests, or Parental Interests" (2017) 2 Cambridge L Rev 226 at 227.

¹⁰⁷ Pierik, above n 104, at 4; Michael Bryan "Parents as fiduciaries: A special place in equity" (1995) 3 Int J Child Rights 227 at 228; and Cemal Hüseyin Güvercin and Berna Arda "Parents refusing treatment of the child: A discussion about child's health right and parental paternalism" (2013) 8 Clin Ethics 52 at 54.

¹⁰⁸ Pierik, above n 104, at 7.

¹⁰⁹ Katz and Webb, above n 71, at 5; and Douglas S Dickema "Parental Refusals of Medical Treatment: The Harm Principle As Threshold for State Intervention" (2004) 25 Theor Med 243 at 250.

¹¹⁰ Güvercin et al, above n 107, at 55-56; and Dickema, above n 109, at 253.

2 *Standards for Intervention*

The two main ethical standards for intervention into parental decision-making are the harm principle and the best interests standard (BIS). The BIS mandates that when making healthcare decisions, parents and medical practitioners should weigh the available options before selecting the one which best promotes the child's welfare.¹¹¹ The BIS has been widely adopted as the ethical standard for parental decision-making.¹¹² However, some scholars have critiqued it for being value-laden and indeterminate.¹¹³ Douglas Diekema proposed the harm principle as an alternative to the BIS.¹¹⁴ The harm principle was inspired by John Stuart Mill's *On Liberty*, in which Mill argued that the "only purpose for which power can rightfully be exercised over any member of a civilized community, against his will is to prevent harm to others".¹¹⁵ The harm principle seeks to identify a threshold below which parental decision-making cannot fall.¹¹⁶

Neither standard is without its flaws. Both are subject to value judgement and are indeterminate.¹¹⁷ It is true that it is not always easy to identify a child's best interests in a given situation. A medical practitioner and a parent may have divergent views of the child's best interests, each honestly and sincerely held. However, the definition of harm is also

¹¹¹ Johan Christiaan Bester "The Harm Principle Cannot Replace the Best Interest Standard: Problems With Using the Harm Principle for Medical Decision Making for Children" (2018) 18 Am J Bioeth 9 at 9.

¹¹² Seema K Shah, Abby R Rosenberg and Douglas S Diekema "Charlie Gard and the Limits of Best Interests" (2017) 171 JAMA Pediatrics 937 at 337; and Thaddeus Mason Pope "The Best Interests Standard: Both Guide and Limit to Medical Decision Making on Behalf of Incapacitated Patients" (2011) 22 Clin Ethics 134 at 135.

¹¹³ Diekema, above n 109, at 247-248; Shah et al, above n 112, at 337; Rebecca Dresser "Standards for Family Decisions: Replacing Best Interests with Harm Prevention" (2003) 3 Am J Bioeth 54 at 55; and Angela J Alessandri "Parents know best: Or do they? Treatment refusals in paediatric oncology" (2011) 47 J Paediatr Child Health 628 at 630.

¹¹⁴ Diekema, above n 109, at 247-250; and Douglas Diekema "Revisiting the Best Interest Standard: Uses and Misuses" (2011) 22 Clin Ethics 128 at 128.

¹¹⁵ John Stuart Mill *On Liberty and Utilitarianism* (Bantam Books, New York, 1993) at 12.

¹¹⁶ Diekema, above n 109, at 250.

¹¹⁷ Giles Birchley "Harm is all you need? Best interests and disputes about parental decision-making" (2016) 42 J Med Ethics 111 at 112; Charles Foster "Harm: as indeterminate as 'best interests', but useful for triage" (2016) 43 J Med Ethics 121 at 121; and Bester, above n 111, at 15.

ambiguous and different decision-makers may view harm in different ways, even in similar situations.

3 *Standards for Intervention in New Zealand Law*

Two of the primary New Zealand statutes that govern some of the contentious legal issues in resolving parent-child relationships are the Care of Children Act 2004 (COCA), and the Oranga Tamariki Act 1989. An analysis of these two acts suggests that both the harm principle and the BIS are utilised in New Zealand.

Both the CRC and the COCA employ a best interests standard; however, they ascribe different weights to the concept. In s 4 of the COCA, the “welfare and best interests of a child...must be the first and paramount consideration”, whereas the child’s best interests is only “a primary consideration” in the CRC.¹¹⁸ The difference between primary and paramount is highlighted by the fact that art 21 of the CRC elevates the child’s best interests to “the paramount consideration” in the context of adoption.

Because best interests is *a* primary consideration, not *the* primary (or paramount) consideration, this means that while the child’s best interests will be afforded significant priority, rather than merely being one of a number of considerations, the decision-maker may legitimately take the rights of others into consideration. According to the Committee, when two sets of rights cannot be reconciled, the decision-maker must analyse and weight the rights of all involved.¹¹⁹

It is clear from s 5 of the COCA that the prevention of harm will form part of the child’s best interests. Similarly, in the Oranga Tamariki Act, the discussion of avoidance of harm and promotion of best interests suggests that rather than being two separate standards, they are intertwined ideas, both of which are relevant to what the Act terms “well-being”.¹²⁰ The concept of well-being is somewhat vague and is open to a variety of interpretations.¹²¹

¹¹⁸ Convention on the Rights of the Child, above n 1, at art 3.

¹¹⁹ Committee on the Rights of the Child, above n 29, at [39].

¹²⁰ Oranga Tamariki Act 1989, ss 4, 4A, 13, 14 and 14AA.

¹²¹ Vincent La Placa, Allan McNaught and Anneyce Knight “Discourse on wellbeing in research and practice” (2013) 3 *IJW* 116 at 116.

Mackay et al define wellbeing as “a combination of the happiness and satisfaction one has with life, and the meaning they attribute to it.”¹²² Knight and McNaught suggest a framework which involves individual, family, community and societal aspects.¹²³

While well-being is not specifically defined in the Act, context indicates it involves taking a holistic view of the child and all aspects of their life, including their identity, development and relationship with their family, whānau, hapū, and iwi.¹²⁴ According to General Comment No. 14, the concept of best interests must take into account the specific circumstances and attributes of the child or children involved,¹²⁵ so it seems that while well-being may be wider than best interests, it incorporates many of the same underlying ideas.

The standard for intervention in the care and protection context is that a child is suffering or is likely to suffer serious harm, which aligns with the harm principle.¹²⁶ However, the application of this part of the Oranga Tamariki Act is subject to s 4A, which states that “the well-being and best interests of the child or young person are the first and paramount consideration”. Section 4A must also have regard to the principles set out in ss 5 and 13. Section 5 explicitly references the CRC, stating that “the child’s...rights (including those set out in UNCROC...) must be respected and upheld.” This means at the very least, the decision-maker must take the best interests right standard in the CRC into account.

The CRC makes it clear that best interests is the appropriate standard for assessing decision-making involving children. The Committee’s 2016 concluding observations on New Zealand’s fifth periodic report urged the state to strengthen efforts to ensure the best interests of the child were applied in all proceedings and decisions as a primary

¹²² Lisa Mackay, Victoria Egli, Laura-Jane Booker and Kate Prendergast “New Zealand’s engagement with the Five Ways to Wellbeing: evidence from a large cross-sectional survey” (2019) 14 Kōtuitui 230 at 230.

¹²³ A Knight and A McNaught (eds) *Understanding wellbeing: An introduction for students and practitioners of health and social care* (Lantern Publishing, Banbury, 2011) at 11.

¹²⁴ Oranga Tamariki, above n 120, s 13.

¹²⁵ Committee on the Rights of the Child, above n 29, at [32].

¹²⁶ Oranga Tamariki, above n 120, ss 14 and 14AA.

consideration.¹²⁷ However, the avoidance of harm is likely to be a key part of this inquiry. General Comment No. 14 lists the child's care, protection, and safety as an element to consider. While this is stated in positive terms and must be read more broadly than simple protection from harm,¹²⁸ it is clear the CRC considers harm a relevant factor.

In light of both international obligations and the way New Zealand legislation has interacted with ideas of harm and best interests, this essay will examine the tension between the rights of children and parents from the perspective that both the promotion of best interests and the avoidance of harm are relevant to the inquiry. It seems like the nature of the intervention is also relevant to what standard takes priority. If the decision-maker is contemplating removing a child from the family, the harm principle may be a more appropriate threshold, whereas, if another kind of intervention is envisaged, which would not remove the child from the family home, it may be more appropriate to focus on best interests, with harm operating as a secondary relevant factor.

V Balancing Rights

As part of the decision whether to intervene, the state must balance two sets of intersecting rights. The first is a clash of individual rights. On one side, the parent's right to make medical decisions on their child's behalf and to raise their child according to their conception of the good life, and on the other, the child's right to the highest attainable standard of health. The second is the clash between individual and collective rights. While parents may argue it is not in their child's best interests to be immunised, many VPDs are highly contagious, meaning the decision not to immunise a child may affect the collective right to health. The collective right to health is especially salient in light of the 2019-2020 measles epidemic and the ongoing COVID-19 pandemic.

Section VI will discuss the tension between individual rights, while Section VII will address the collective right to health. Section VIII will then consider whether, based on

¹²⁷ Committee on the Rights of the Child *Concluding observations on the fifth periodic report of New Zealand* CRC/C/NZL/CO/5 (21 October 2016) at [16].

¹²⁸ Committee on the Rights of the Child, above n 29, at [71].

these two sets of rights, a decision by the state to override parental refusal of consent by mandating immunisation could be justified in theory.

VI The Clash of Individuals: Parental Rights vs Children's Rights

This section examines three key arguments which may be employed by parents wishing to refuse consent to immunisation on their child's behalf. Firstly, that the disease being immunised against is not a danger to the child. Secondly, that it is in the child's best interests not to be immunised, and thirdly, that the parent's decision to refuse immunisation on the child's behalf is protected by the right to freedom of religion and belief. It will discuss whether, despite these arguments, limitation of parental rights can be justified in order to protect the child's right to health in this context.

A Risk of Harm

A key argument against state intervention is the idea that the degree of harm connected to the decision not to immunise is not high enough to warrant such an intervention. State intervention in parental decision-making is typically triggered by a direct and immediate threat to the child's health, whereas immunisation protects against a potential future harm which may never eventuate.¹²⁹ This subsection will examine whether there is actually a risk of harm, and if so, does the danger to the child's health outweigh the parental right to make medical decisions for their child.

Vaccines have dramatically decreased the prevalence of childhood diseases like measles and polio. However, the success of immunisation is a double-edged sword. Declining disease rates means that many parents have no first-hand knowledge of the ravages of epidemic disease, and as a result may underestimate the danger of such diseases.¹³⁰ Some parents believe that their child is unlikely to contract a VPD, but even if they do, such

¹²⁹ Alberto Giubilini and Julian Savulescu "Vaccination, Risks, and Freedom: The Seat Belt Analogy" (2019) *Pub Health Ethics* 237 at 238-239.

¹³⁰ Benjamin Gardner, Anna Davies, John McAteer and Susan Michie "Beliefs underlying UK parents' views towards MMR promotion intervention: A qualitative study" (2010) 15 *Psychol Health Med* 220 at 227; and Charitha Gowda and Amanda F Dempsey "The rise (and fall?) of parental vaccine hesitancy" (2013) 9 *Hum Vaccin Immunother* 1755 at 1757.

diseases only cause mild illnesses that the immune system can and should deal with naturally.¹³¹ This perception is likely shaped by survivorship bias. In other words, most people who hold these beliefs either did not personally experience a negative outcome from contracting measles, or never contracted measles.¹³²

In fact, measles can be very dangerous. Encephalitis, a potentially deadly infection, is associated with 1 in 1,000 cases of measles.¹³³ In comparison, acute allergic reactions to the MMR vaccine occur in only around 1 in 1,000,000 cases.¹³⁴ During the 2019-2020 New Zealand measles epidemic, 35.5% of cases required hospitalisation.¹³⁵ The epidemic also spread to Samoa, resulting in the deaths of 83 people.¹³⁶ This highlights the fact that immunisation decisions made in New Zealand may also affect our Pacific neighbours. It will be interesting to see if risk perceptions shift in the context of a future COVID-19 vaccine, as nearly everyone making vaccine-related decisions will have experienced or witnessed the effects of the disease firsthand.

Conversely, parents may overestimate the danger of the vaccine in comparison to the disease.¹³⁷ This perception can be dangerous, as it can lead to decreased immunisation

¹³¹ Karin Gross, Karin Hartmann, Elisabeth Zemp and Sonja Merten “‘I know it has worked for millions of years’: the role of the ‘natural’ in parental reasoning against child immunisation in a qualitative study in Switzerland” (2015) 15 BMC Pub Health at 3; and Helen Petousis-Harris, Felicity Goodyear-Smith, Sue Godinet and Nikki Turner “Barriers to childhood immunisation among New Zealand mothers” (2002) 29 NZFP 396 at 398-399.

¹³² Johannes Mischlinger, Riko Muranaka, Silja Buhler and Michael Ramharter “Measles, Vaccines, and Types of Perception Bias in Public Debates” (2020) 70 CID 1258 at 1259; and Lundal Bond and Terry Nolan “Making sense of perceptions of risk of diseases and vaccinations: a qualitative study combining models of health beliefs, decision-making and risk perception” (2011) 11 BMC Pub Health at 7.

¹³³ Carolyn Edwards “Is the MMR vaccine safe” (2001) 174 WJM 197 at 198.

¹³⁴ Johnathan Bowes “Measles, misinformation, and risk: personal belief exemptions and the MMR vaccine” (2016) J L Biosci 718 at 720.

¹³⁵ ESR *Measles weekly report – Week 8 15-21 February 2020* (ESR, New Zealand, 2020).

¹³⁶ World Health Organization and United Nations International Children's Emergency Fund *Measles Outbreak in the Pacific-Situation Report No.11* (WHO and UNICEF, 2020) at 1; and Adam T Craig, Anita E Heywood and Heather Worth “Measles epidemic in Samoa and other Pacific islands” (2020) 20 The Lancet 273 at 273-274.

¹³⁷ Daniel Brieger, Matthew Edwards, Poonam Mudgil and John Whitehall “Knowledge, attitudes and opinions towards measles and the MMR vaccine across two NSW cohorts” (2017) 41 Aust NZ J Publ Heal 641 at 643.

uptake which may cause the resurgence or reintroduction of VPDs. The United Kingdom (UK) provides an example of the long-term consequences of vaccine misinformation. In 1998, *The Lancet* published a paper by Andrew Wakefield, which falsely linked the MMR vaccine to autism. Immunisation rates declined from 91% to just 80% in 2008,¹³⁸ and measles again became endemic in the UK. Even though Wakefield's claims were thoroughly refuted,¹³⁹ measles would not be eliminated in the UK until 2017.¹⁴⁰

Moreover, individual risk levels are highly unpredictable and may vary significantly depending on region. Unimmunised children tend to appear in clusters, meaning that immunisation levels in a particular geographic area may be much lower than the national average.¹⁴¹ Chains of infection occur more easily within these clusters, placing the children within them at greater risk of harm.¹⁴² The level of potential harm faced by unimmunised children in a particular country will also vary depending on circumstances, if there is an outbreak, or if immunity levels fall dangerously low, the degree of potential harm will be much higher, and state intervention would be more easily justified.

In New Zealand and the United Kingdom, several immunisation cases have shown that the courts do not consider challenges based on the safety and efficacy of approved vaccines to be credible.¹⁴³ If the state were to pass legislation limiting the parental ability to refuse

¹³⁸ Dennis K Flaherty "The Vaccine-Autism Connection: A Public Health Crisis Caused by Unethical Medical Practices and Fraudulent Science" (2011) 45 *Ann Pharmacoth* 1302 at 1302.

¹³⁹ Dorota Mrozek-Budzyn, Agnieszka Kiełtyka and Renata Magewska "Lack of association between measles-mumps-rubella vaccination and autism in children: a case-control study" (2010) 29 *Pediatr Infect Dis J* 397 at 399-400; Annamari Makela, J Pekka Nuorti and Heikki Peltola "Neurologic disorders after measles-mumps-rubella vaccination" (2002) 110 *Pediatrics* 957 at 962-963; Kristin C Klein and Emily B Diehl "Relationship Between MMR Vaccine and Autism" (2004) 38 *Ann Pharmacother* 1297 at 1299; and Luke E Taylor, Amy L Swerdfeger and Guy D Eslick "Vaccines are not associated with autism: An evidence-based meta-analysis of case-control and cohort studies" (2014) 32 *Vaccine* 3623 at 3628

¹⁴⁰ Vanessa Saliba "Measles has been eliminated in the UK – so why do we still see cases and outbreaks?" (22 January 2018) Public Health England <publichealthmatters.blog.gov.uk>.

¹⁴¹ Ross D Silverman "No More Kidding Around: Restructuring Non-Medical Childhood Immunization Exemptions to Ensure Public Health Protection" (2003) 12 *Annals Health L* 277 at 285.

¹⁴² Saad B Omer, Daniel A Salmon, Walter A Orenstein, Patricia DeHart and Neal Halsey "Vaccine Refusal, Mandatory Immunization, and the Risks of Vaccine-Preventable Diseases" (2009) 360 *N Engl J Med* 1981 at 1983.

¹⁴³ *Re B (A Child: Immunisation)*, above n 58, at [94]; *Re SPO*, above n 56, at [29]; and *London Borough of Tower Hamlets v MFT (a child) (by the child's guardian)* [2020] EWHC 220 (Fam) at [20].

consent for immunisation, this legislation would have a foundation in existing judicial reasoning, which has accepted the idea that vaccines are overwhelmingly safe and has dismissed 'evidence' to the contrary as lacking in credibility.

B Free-Riding in the Child's Best Interests

Another common argument is that it is in the child's best interests to rely on herd immunity rather than immunisation for protection.¹⁴⁴ The logic is that because enough other people are immunised, the child will be protected from both the disease and any potential side effects from the vaccine.¹⁴⁵ This is known as "free-riding".¹⁴⁶

However, herd immunity can be unreliable and may not provide consistent protection. Immunisation levels fluctuate constantly and can be affected by new births and people moving into an area.¹⁴⁷ Moreover, even if herd immunity is stable within a particular community, the child is only protected as long as they stay within that community. If an unimmunised child travels to a country or region with low immunisation rates, they will be placed at risk.¹⁴⁸ In comparison, the MMR vaccine is extremely reliable.¹⁴⁹ People who rely on herd immunity for medical reasons only do so because it is their only option. Objectively, immunisation provides safer and more reliable protection than herd immunity.

Johan Bester argues that aside from fluctuating immunisation rates, the best interests argument is fundamentally flawed. He suggests that the herd immunity threshold does not allow room for non-medical vaccine refusal. 92%-95% of the population must be immunised before herd immunity is achieved, however, a certain percentage of the population either cannot receive immunisations for medical reasons or suffer vaccine failure. It is reasonable to surmise that this group may account for up to 5% of the total

¹⁴⁴ Giubilini et al, above n 37, at 548-549.

¹⁴⁵ Mariette van de Hoven "Why One Should Do One's Bit: Thinking about Free Riding in the Context of Public Health Ethics" (2012) 5 Pub Health Ethics 154 at 155.

¹⁴⁶ Yoko Ibuka, Meng Li, Jeffrey Vietri, Gretchen B Chapman and Alison P Galvani "Free-Riding Behavior in Vaccination Decisions: An Experimental Study" (2014) 1 PLOS ONE 1 at 1.

¹⁴⁷ Bester, above n 42, at 380.

¹⁴⁸ Alberto Giubilini *The Ethics of Vaccination* (Palgrave Pivot, Switzerland, 2019) at 19.

¹⁴⁹ Bester, above n 42, at 378.

population, leaving very little room for excess parental immunisation refusal without placing the maintenance of herd immunity, and the child's health at risk.¹⁵⁰

The strength of the herd-immunity-best-interests argument is highly dependent on context. Many people argue that free-riding is morally wrong because immunisation burdens should be shared equally.¹⁵¹ However, if the VPD is not prevalent within the community, and herd immunity remains strong, it may be reasonable for parents to decide immunisation is not in their child's best interests.¹⁵² But, if the disease is prevalent within the community, or if immunisation levels fall far enough to threaten herd immunity, the best interests argument will become easier to rebut.

In terms of the New Zealand context, there is no herd immunity for measles, as immunisation coverage remains under 95%.¹⁵³ But, in 2017 New Zealand successfully achieved elimination status for the first time.¹⁵⁴ This means that while measles is no longer endemic to the country, it could still be reintroduced, and if it is, immunisation levels are not high enough to prevent the spread. This was evidenced by the 2019-2020 measles epidemic, with 2213 reported cases between 1 January 2019-31 December 2019.¹⁵⁵

While immunisation rates remain below herd immunity levels, epidemics still can and do occur, and unimmunised children are in danger. As a result, the argument that it is in a New Zealand child's best interests not to be immunised is not convincing.

¹⁵⁰ Bester, above n 42, at 381.

¹⁵¹ Katharine Browne "The Measles and Free Riders: California's Mandatory Vaccination Law" (2016) 25 *Camb Q Healthc Ethics* 472 at 475-476.

¹⁵² Giubilini, above n 148, at 32.

¹⁵³ Ministry of Health "National and DHB immunisation data" <health.govt.nz>.

¹⁵⁴ Ministry of Health "Measles and rubella officially eliminated in New Zealand – Media release" (6 October 2017) <health.govt.nz>.

¹⁵⁵ ESR *Notifiable Diseases tables by age, sex, ethnic group, 2019* (ESR, New Zealand, 2019).

C Freedom of Thought and Religion

Alongside the lack of harm and best interests arguments, vaccines may also be refused on the basis of religious or philosophical belief.¹⁵⁶ Certain religious groups, like Christian Science eschew the practice of immunisation altogether (along with other medical interventions), instead believing disease should be treated by prayer rather than medicine.¹⁵⁷ Other religious groups may have moral objections to vaccines which use cell lines derived from aborted fetuses.¹⁵⁸ Or to vaccines against diseases like human papillomavirus (HPV) because they believe they promote an immoral lifestyle.¹⁵⁹ Philosophical-based vaccine refusal may arise from any number of beliefs including adherence to alternative or “natural” treatments and lifestyles,¹⁶⁰ the perception that vaccines are dangerous,¹⁶¹ and overall distrust of the government and “big pharma”.¹⁶²

Section 13 of New Zealand Bill of Rights Act 1990 (NZBORA) states that: “[e]veryone has the right to freedom of thought, conscience, religion, and belief, including the right to adopt and to hold opinions without interference”. This right is also contained in art 18 of the ICCPR. However, it is also clear that there are times when it is reasonable to limit certain aspects of the expression of these rights in order to protect the safety and rights of

¹⁵⁶ Roland Pierik “On religious and secular exemptions: A case study of childhood vaccination waivers” (2017) 17 *Ethnicities* 220 at 221; and Steve Clarke, Alberto Giubilini and Mary Jean Walker “Conscientious Objection to Vaccination” (2017) 31 *Bioethics* 155 at 155.

¹⁵⁷ Eric Wombwell, Mary T Fangman, Alannah K Yoder and David L Spero “Religious Barriers to Measles Vaccination” (2015) 40 *J Community Health* 597 at 600.

¹⁵⁸ Gordana Pelčić, Silvana Karačić, Galina L Mikirtichan, Olga I Kubar, Frank J Leavitt, Michael Chengtek Tai, Naoki Morishita, Suzana Vuletić and Luka Tomašević “Religious exception for vaccination or religious excuses for avoiding vaccination” (2016) 57 *Croat Med J* 516 at 516 and 520.

¹⁵⁹ Sarah JJ Touyz and Louis ZG Touyz “The kiss of death: HPV rejected by religion” (2013) 20 *Curr Oncol* 52 at 52; and Rachel C Shelton, Anna C Snively, Mara De Jesus, Megan D Othus and Jennifer D Allen “HPV Vaccine Decision-Making and Acceptance: Does Religion Play a Role?” (2013) 52 *J Relig Health* 1120 at 1122.

¹⁶⁰ Kavita Shah Arora, Jane Morris and Allan J Jacobs “Refusal of Vaccination: A Test to Balance Societal and Individual Interests” (2018) 29 *J Clin Ethics* 206 at 206-210.

¹⁶¹ Douglas S Dickema “Personal Belief Exemptions from School Vaccination Requirements” (2013) 35 *Annu Rev Public Health* 275 at 282.

¹⁶² Tara C Smith “Vaccine Rejection and Hesitancy: A Review and Call to Action” (2017) 4 *OFID* at 2.

others.¹⁶³ This idea was famously articulated in the United States case *Prince v Massachusetts*, where the court stated: “Parents may be free to become martyrs themselves. But it does not follow that they are free, in identical circumstances, to make martyrs of their children”.¹⁶⁴ As will be discussed in more detail in the next section, the s 13 right to freedom of religion and thought may be justifiably limited when if the limitation is necessary, reasonable and proportionate.¹⁶⁵ Once again, the prevalence of disease will be important to the balancing of rights.

Several New Zealand cases relating to parental refusal of medical treatment have made it clear that the parental right to freedom of religion does not outweigh the child's right to life and health. In the Court of Appeal case *Re J (An Infant)*, Gault J defined the scope of the NZBORA s 13 right “as to exclude doing or omitting anything likely to place at risk the life, health or welfare of their children.”¹⁶⁶ While this comment was made in the context of a life-threatening medical condition, and therefore may not have general applicability,¹⁶⁷ the judgment was also relied on in the context of medication intervention in a non-life-threatening situation (the child suffered a detached retina) in the High Court decision *Auckland Healthcare Services Limited v Liu*.¹⁶⁸

The courts may be less likely to intervene in an immunisation case unless, as in *Capital and Coast District Health Board v DRB*, the child is in immediate danger of suffering harm,¹⁶⁹ or if at least one guardian supports immunisation.¹⁷⁰ However, the fact that the courts are willing to limit the parental right to religion in order to protect the child's health suggests that it would not be wrong to override religious or philosophical-based vaccine refusal in principle, especially during an epidemic.

¹⁶³ New Zealand Bill of Rights Act, above n 62, at s 5; and International Covenant on Civil and Political Rights 999 UNTS 171 (opened for signature 19 December 1966, entered into force 23 March 1976), art 18.

¹⁶⁴ *Prince v Commonwealth of Massachusetts* 321 US 158 (1944) at 170.

¹⁶⁵ *R v Hansen* [2007] NZSC 7, [2007] 3 NZLR 1 at [104].

¹⁶⁶ *Re J (An Infant): B and B v Director-General of Social Welfare* [1996] 2 NZLR 134 at 146.

¹⁶⁷ Luke Morrison “Legal Responses to Non-Life-Threatening Medical Neglect” (LLB(Hons) Dissertation, University of Otago, 2011) at 28.

¹⁶⁸ *Auckland Healthcare Services v Liu* HC Auckland M812/96, 11 July 1996 at 7-8.

¹⁶⁹ *Capital and Coast District Health Board v DRB*, above n 55.

¹⁷⁰ *Alex Stone v Sophie Reader*, above n 57.

VII The Tension Between Individual and Collective Rights: Public Health in a Pandemic

As well as the tension between individual rights discussed in Section VI, vaccine refusal also raises collective rights issues. It may be necessary to limit individual rights in order to protect the collective right to health if unimmunised children will place the community at risk. This is especially salient in light of the ongoing COVID-19 pandemic. Several vaccines are already in development and it is likely that wide-scale immunisation represents the best way to protect the collective right to health from the threat of COVID-19.

A Public Health

The state has a responsibility to protect the collective right to health by preventing the spread of infection.¹⁷¹ As a member of the World Health Organisation (WHO), New Zealand is bound without reservation by the International Health Regulations (IHR). The IHR requires the state to develop and maintain the capacity to respond to public health emergencies.¹⁷² Responding to public health emergencies usually involves implementing preventative public health measures.¹⁷³

Immunisation is a key public health tool because the phenomenon of herd immunity means that not only is the individual receiving the vaccine protected against disease, but

¹⁷¹ James C Thomas, Michael Sage, Jack Dillenberg and V James Guillory “A Code of Ethics for Public Health” (2002) 92 Am J Public Health 1057 at 1057; and International Covenant on Economic, Social, and Cultural Rights 993 UNTS 3 (opened for signature 16 December 1966, entered into force 3 January 1976), art 12.

¹⁷² Ministry of Health “International Health Regulations 2005” (10 December 2007) Ministry of Health <health.govt.nz>.

¹⁷³ David R Buchanan “Public Health Interventions: Ethical Implications” in Anna C Mastroianni, Jeffrey P Kahn and Nancy E Klass (eds) *The Oxford Handbook of Public Health Ethics* (Oxford University Press, New York, 2019) 77 at 77.

vulnerable people who cannot be immunised are also protected.¹⁷⁴ Herd immunity relies on collective action for its establishment and maintenance.¹⁷⁵

B Individual Versus Collective Rights

Public health measures often limit individual rights and the state may need to use its police powers to ensure compliance.¹⁷⁶ So far, responses to COVID-19 have limited rights of freedom of assembly, movement, and peaceful association. School closures have also limited children's rights to education.

The idea of limiting individual rights does not sit well with Western liberal thought, which has traditionally ascribed greater importance to the rights of individuals than the rights of the collective.¹⁷⁷ However, it must also be acknowledged that New Zealand has a bi-cultural system and other cultures may prioritise collective interests over individual ones.

While individual rights are important, in the context of infectious disease, they may place the community at risk. As seen in several countries, when restrictions are not consistently applied, infection spreads rapidly, and health systems are quickly overwhelmed.¹⁷⁸ While some would argue that individual parental vaccine refusal does not jeopardise the collective

¹⁷⁴ Van den hoven, above n 145, at 155; Jacqueline K Olive, Peter J Hotez, Ashish Damania and Melissa S Nolan "The state of the antivaccine movement in the United States: A focused examination of nonmedical exemptions in states and counties" (2018) 15 PLoS Med at 5-6; and Petousis-Harris et al, above n 131, at 396.

¹⁷⁵ Lawrence O Gostin and Lesley Stone "Health of the People: The Highest Law?" in Angus Dawson and Marcel Verweij (eds) *Ethics, Prevention and Public Health* (Oxford University Press Inc, New York, 2007) 59 at 68.

¹⁷⁶ Buchanan, above n 173, at 77.

¹⁷⁷ Kenneth Ruddle and Anthony Davis "Human Rights and neo-liberalism in small-scale fisheries: Conjoined priorities and processes" (2013) 39 Marine Policy 87 at 88-9; Jan Narveson "Collective Rights" (1991) 4 Can JL & Jur 329 at 337; Benjamin Mason Meier "The Highest Attainable Standard: Advancing a Collective Human Right to Public Health" (2005) 37 Colum Hum Rts L Rev 101 at 137; and Bruce Jennings "Public Health and Civic Republicanism: Towards an Alternative Framework for Public Health Ethics" in Angus Dawson and Marcel Verweij (eds) *Ethics, Prevention and Public Health* (Oxford University Press Inc, New York, 2007) 30 at 31.

¹⁷⁸ Newsroom "Lack of Lockdown Increased COVID19 Deaths in Sweden" (3 July 2020) University of Virginia Health System <newsroom.uvahealth.com>; Owen Matthews "Britain Drops Its Go-It-Alone Approach to Coronavirus" (March 17 2020) Foreign Policy <foreignpolicy.com>; and Ed Yong "The U.K.'s Coronavirus 'Herd Immunity' Debacle *The Atlantic* (online ed, 16 March 2020).

right to health, the aftermath of the Wakefield paper in the United Kingdom shows that individual decisions are often part of a larger trend which may destroy herd immunity.¹⁷⁹

Accordingly, it is unrealistic to think individual rights could exist without restraint. Pandemic or epidemic spread of disease is a national emergency which can place enormous strain on health systems and cripple economies. This creates increased social licence to limit individual rights.¹⁸⁰

1 Overriding Individual Rights

The limitation of individual rights through strict public health measures is not a new phenomenon. During the 1919 influenza epidemic, the closure of public buildings and the prohibition of public meetings was deemed necessary to protect the health of the nation. In 1925, a polio epidemic resulted in school closures and the limitation of children's movements.¹⁸¹

The ability to limit rights in this way is reflected in international and domestic standards. The CRC explicitly mentions that certain rights may be limited to protect public health and safety.¹⁸² The ICCPR also acknowledges that when the "life of the nation" is threatened states may take measures which derogate certain rights.¹⁸³ This is also reflected in s 5 of NZBORA, which states that rights can be limited if "prescribed by law" and "as can be demonstrably justified in a free and democratic society".¹⁸⁴

¹⁷⁹ Flaherty, above n 138, at 1302.

¹⁸⁰ Michael Seymour *A Liberal Theory of Collective Rights* (McGill-Queen's University Press, Quebec, 2017) at 34; Kathryn Sikkink, Timothy McCarthy and Mathias Risse "Examining the Coronavirus from the Lens of Human Rights" (2020) Carr Center Covid-19 Discussion Series at 2; and Erin M Page "Balancing Individual Rights and Public Health Safety During Quarantine: The US and Canada" (2007) 38 Case W Res J Intl L 517 at 520.

¹⁸¹ *Borrowdale v Director-General of Health* [2020] NZHC at [55] and [58].

¹⁸² Convention on the Rights of the Child, above n 1, at art 14 and 15.

¹⁸³ International Covenant on Civil and Political Rights, above n 163, at art 4.

¹⁸⁴ New Zealand Bill of Rights Act, above n 62, at s 5.

Referencing *R v Hansen*,¹⁸⁵ the judgement in *Borrowdale v Director-General of Health* stated that a public health measure which limits individual rights will be justified if it is a necessary, reasonable, and proportionate response to a public health emergency.¹⁸⁶

C COVID-19 and Children's Rights

The COVID-19 pandemic is currently the most pressing threat to collective health in New Zealand. While it is likely that a vaccine will be developed in the not so distant future, reaching immunisation levels high enough to support herd immunity may be challenging.¹⁸⁷ A comprehensive analysis of the necessity, reasonableness and proportionality of a mandatory immunisation programme despite its limitation of parental rights, is outside the scope of this essay, however, this section will discuss possible policy considerations which may be relevant to such an analysis in this context.

1 What Kind of Threat Does COVID-19 Pose?

One such policy consideration is the nature of the threat which the public health measure is intended to guard against. The less serious the threat, the harder it may be to justify more restrictive measures.

COVID-19 is certainly a serious threat. It is a fast-moving, contagious, and often deadly disease, which, as of August 27th, 2020, has infected over 33 million and killed nearly 1 million people worldwide.¹⁸⁸ 1477 cases and 25 deaths have occurred in New Zealand.¹⁸⁹ The rapid spread of infectious disease can overwhelm health systems, potentially leading

¹⁸⁵ *R v Hansen*, above n 165, at [104].

¹⁸⁶ *Borrowdale v Director-General of Health*, above n 181, at [97].

¹⁸⁷ Léone Walker, Emma Ward and Daniel Gambitsis *Improving New Zealand's childhood immunisation rates – Evidence Review* (Allen and Clarke, New Zealand, 2020) at 3; and Eamon N Dreisbach "Vaccine hesitancy could make it difficult to achieve herd immunity for COVID-19" (14 July 2020) Healio News <healio.com>.

¹⁸⁸ World Health Organization "WHO Coronavirus Disease (COVID-19) Dashboard" (updated 26 September 2020) WHO <covid19.who.int>.

¹⁸⁹ Ministry of Health "COVID-19: Current cases" (updated 27 September 2020) <health.govt.nz>.

to further deaths as the health care system's capacity to deal with other medical issues is reduced and urgent surgeries may have to be delayed.¹⁹⁰

The extent of the threat is also a relevant consideration. For example, the Ebola virus is extremely deadly, and there are ongoing outbreaks in the Democratic Republic of the Congo.¹⁹¹ However mandatory immunisation may not be a proportionate response because the threat is localised and has not spread to New Zealand. COVID-19 on the other hand is a worldwide pandemic, therefore mandatory immunisation is more likely to be seen as a proportionate response to the threat.

2 *Danger to Children and the Wider Community*

Another relevant policy consideration is what effect implementing or not implementing a proposed measure may have on children and the wider community.

The COVID-19 pandemic raises interesting children's rights issues. Evidence suggests that children usually have milder symptoms than adults.¹⁹² The fact the virus is less dangerous for children brings the reasonableness of a mandatory immunisation programme into question. Arguably, the primary purpose of immunising children would be to protect the wider community. But, despite reduced personal benefits the child would be still exposed to the potential danger of an adverse reaction.

However, immunisation may be less restrictive on children's rights than existing COVID-19 measures. While *Borrowdale* affirms that self-isolation and quarantine measures have

¹⁹⁰ Rowan Quinn "Patients miss out on surgery under COVID-19 lockdown" *RNZ* (20 April 2020); and Andre Chumko "Coronavirus: Urgent surgeries, scans cancelled as COVID-19 empties hospitals" *Stuff* (5 April 2020).

¹⁹¹ World Health Organization "10th Ebola outbreak in the Democratic Republic of the Congo declared over; vigilance against flare-ups and support for survivors must continue" (25 June 2020) <who.int/news-room>; and Medecins Sans Frontieres "DRC Ebola outbreaks – Crisis update – September 2020" (4 September 2020) MSF <msf.org>.

¹⁹² Ian P Sinha, Rachel Harwood, Malcolm G Semple, Daniel B Hawcutt, Rebecca Thursfield, Omendra Narayan, Simon E Kenny, Russel Viner, Simon Langton Hower and Kevin W Southern "COVID-19 infection in children" (2020) 8 *The Lancet* 446 at 446; and Lara S Shekardemian, Nabihah R Mahmood, Katie K Wolfe, Becky J Riggs, Catherine E Ross, Christine A McKiernan...Jeffrey P Burns "Characteristics and Outcomes for Children With Coronavirus Disease 2019 (COVID-19) Infection Admitted to US and Canadian Pediatric Intensive Care Units" (2020) *JAMA Pediatr* at 1.

been necessary, reasonable, and justified thus far,¹⁹³ such measures may have negatively affected children. Education has been disrupted,¹⁹⁴ especially in Auckland, and some children will be required to repeat their final year at school.¹⁹⁵ Some children have also dropped out of school to seek employment to support their families economically.¹⁹⁶ Moreover, there is evidence that self-isolation measures have a negative effect on children's well-being.¹⁹⁷

However, the effect on children is not the only relevant consideration. The state must also examine potential harm the wider collective may suffer if children are not immunised. While children seem to experience mild COVID-19 symptoms in comparison to adults, and are more likely to be asymptomatic, they can still contract the virus.¹⁹⁸ As a result, children are vectors for disease and represent a threat to public health.¹⁹⁹ In the United States, several schools reopened, only to quickly shut again due to COVID-19 outbreaks among the student body.²⁰⁰

¹⁹³ *Borrowdale v Director-General of Health*, above n 181, at [292].

¹⁹⁴ One News "Calls for all NCE students to get automatic pass after Covid-19 disruptions" *One News* (online ed, New Zealand, 27 August 2020).

¹⁹⁵ John Gerritsen "Covid19 coronavirus: Auckland students 'disadvantaged by lockdown', schools planning catch-up classes" *New Zealand Herald* (online ed, New Zealand, 26 August 2020).

¹⁹⁶ Khylee Quince "Coronavirus: Covid inequities are showing up in school leaver figures" *Stuff* (online ed, New Zealand, 22 August 2020); and Office of the Children's Commissioner *Supplementary information regarding the impact of COVID-19 on children's rights in Aotearoa New Zealand, for the United Nations Committee on the Rights of the Child – Submission to the UNCRC on COVID-19* (Office of the Children's Commissioner, New Zealand, 2020) at 3.

¹⁹⁷ Ginny Sprang and Miriam Silman "Posttraumatic Stress Disorders in Parents and youth After Health-Related Disasters" (2013) 7 *Disaster Med Public Health Prep* 105 at 107.

¹⁹⁸ Shana Godfred-Cato, Bobbi Bryant, Jessica Leung, Matthew E Oster, Laura Conklin, Joseph Abrams...Ermias Belay "COVID-19-Associated Multisystem Inflammatory Syndrome in Children – United States, March-July 2020" (2020) 69 *MMWR* 1074 at 1074; Laura Smith-Spark "Adults may not be the only Covid 'long haulers.' Some kids still have symptoms, months after falling ill" *CNN* (online ed, United States, 10 August 2020); and Centers for Disease Control and Prevention "Coronavirus Disease – Care for Children" (14 August 2020) CDC <cdc.gov>.

¹⁹⁹ Christine M Szablewski, Karen T Chang, Marie M Brown, Victoria T Chu, Anna R Yousaf, Ndubuisi Anyalechi...Rebekah J Stewart "SARS-CoV-2 Transmission and Infection Among Attendees of an Overnight Camp – Georgia, June 2020" (2020) *MMWR* 1023 at 1023-4.

²⁰⁰ Tawnell D Hobbs "Schools Are Reopening, Then Quickly Closing Due to Coronavirus Outbreaks" *The Wall Street Journal* (online ed, United States, 17 August 2020).

Moreover, COVID-19 can still pose a threat to children. The novel nature of the virus means it is impossible to predict the long-term impacts of COVID-19 on the human body. Unforeseen harm may result from infection during childhood,²⁰¹ and children with underlying health conditions may suffer more adverse effects.²⁰² COVID-19 may also disproportionately endanger children from ethnic minorities,²⁰³ including Māori, because of existing inequities in access to health determinants, which can increase the severity of respiratory disease.²⁰⁴ The CRC applies to all children equally, and it should not be acceptable to place the lives of society's most vulnerable members at risk, simply because it would provide some individual benefit to others.

3 *Efficacy and Sustainability of Other Measures*

A third relevant policy consideration relates to whether an alternative measure could prevent the spread of COVID-19 in a more effective or less restrictive way.

An alternative to immunisation would be to continue the elimination strategy of border restrictions and self-isolation and quarantine measures. While this approach shows it is possible to halt the spread of COVID-19 through means other than immunisation, such measures are by their nature highly restrictive, and as the second outbreak in August 2020 demonstrates, border restrictions do not always prevent a virus's return.²⁰⁵ Moreover, the ongoing economic impacts of lockdowns suggests that immunisation may be more sustainable and more effective long-term method of preventing the spread of COVID-19.

Another key policy consideration is how restrictive the measure needs to be to achieve its goal. The principle of least restrictive means suggests that more coercive public health

²⁰¹ Godfred-Cato et al, above n 198, at 1074; Smith-Spark, above n 198; and Centers for Disease Control and Prevention, above n 198.

²⁰² Roberta L DeBiasi, Xiaoyan Song, Meghan Delaney, Michael Bell, Karen Smith, Jay Pershad...David Wessel "Severe Coronavirus Disease-2019 in Children and Young Adults in the Washington, DC, Metropolitan Region" (2020) 233 J Pediatr 199 at 200-1.

²⁰³ Godfred-Cato et al, above n 198, at 1078; and Centers for Disease Control and Prevention "Health Equity Considerations & Racial & Ethnic Minority Groups" (24 July, 2020) CDC <cdc.gov>.

²⁰⁴ Ministry of Health *COVID-19 in children* (Ministry of Health, New Zealand, 2020) at 5.

²⁰⁵ RNZ "Geneticist James Hadfield: Mapping and tracking Covid-19 in NZ" *RNZ* (online ed, 29 August 2020).

measures should only be employed when less restrictive measures would not achieve the desired results.²⁰⁶ In this context, the state would need to consider whether the uptake for a voluntary immunisation programme, rather than a mandatory one, would be high enough to establish herd immunity

A consideration which might inform policy decision-making is the immunisation rates for other vaccines. New Zealand has a poor record of achieving herd immunity for VPDs, including measles.²⁰⁷ This suggests that the goal of achieving herd immunity for COVID-19 may be difficult to achieve without government intervention. The attitude towards the hypothetical vaccine is also relevant. Despite the fact a vaccine has not yet been developed, anti-COVID-19-vaccine rhetoric has already sprung up in New Zealand, and has been widely disseminated online,²⁰⁸ at protests,²⁰⁹ and by political campaigns.²¹⁰

D Summary

Overall, while there are issues with mandating immunisations which will be discussed in more detail in subsequent sections, the COVID-19 pandemic creates a unique situation where individual actions may have an increased impact on the collective right to health. As a result, there is likely increased social licence to implement measures such as mandatory childhood immunisations.

²⁰⁶ Ross Upshur "Principles for the Justification of Public Health Interventions" (2002) 93 Can J Public Health 101 at 102; and Miodrag A Jovanović *Collective Rights – A Legal Theory* (Cambridge University Press, Cambridge, 2012) at 152.

²⁰⁷ Ministry of Health, above n 47.

²⁰⁸ Rupali Jayant Limaye, Molly Sauer, Joseph Ali, Justin Bernstein, Brian Wahl, Anne Barnhill and Alain Labrique "Building trust while influencing COVID-19 content in the social media world" (2020) 2 The Lancet 277 at 277; and Margalit Toledano "Dealing with vaccine hesitancy in times of coronavirus" *Stuff* (online ed, New Zealand, 3 May 2020).

²⁰⁹ Melanie Earley "Coronavirus: More than a thousand turn out for anti-lockdown rally in Auckland" *Stuff* (online ed, New Zealand, 12 September 2020).

²¹⁰ Amelia Wade "Advance NZ ordered to remove Facebook video claiming Labour will force vaccination on citizens" *New Zealand Herald* (28 August 2020).

E Competent Children

While mandatory childhood immunisation could be justified in relation to children who cannot provide consent themselves, what about children who may be Gillick competent, and therefore capable of providing or withholding consent?

While children under 10 are probably less likely to spread COVID-19, older children may spread it at rate comparable to that of adults.²¹¹ Because competent children are more likely to be at the higher end of the under-16 age range, the children who may be able to refuse immunisation are also the children who may pose the greatest risk to others.

Usually, the idea of competency creates tensions between the child's right to their developing autonomy and their best interests. However, in this context, the rights of third parties are involved. The child is not only "a [potential] *victim* with individual needs and rights...[but] a potential *vector* of disease that is of concern to the community."²¹²

Because of the danger to collective rights, a child may be less likely to be judged competent to refuse the vaccine in the first place, partly because this decision may clash with the decision-maker's own views. Because of the increased danger to others the decision-maker may also require increased understanding, not only of the personal implications but also the impact on others.

Aside from the issue of assessing competence, a key question is, if the state does not intend to limit the rights of adults to refuse the vaccine, would it be fair to limit the rights of competent children to refuse? It is true that each unimmunised child would represent a danger to the community, however forcing a vaccine on a competent child would mean

²¹¹ Taylor Heald-Sargent, William J Muller, Xiaotian Zheng, Jason Rippe, Ami B Patel and Larry K Kociolek "Age-Related Differences in Nasopharyngeal Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Levels in Patients With Mild to Moderate Coronavirus Disease 2019 (COVID-19)" (2020) 174 JAMA Pediatr 902 at 902; and Young Jook Park, Young June Choe, Ok Park, Shin Young Park, Young-Man Kim, Jieun Kim, Sanghui Kweon, Yeohee Woo...and Eun Kyeong Jeong "Contact Tracing during Coronavirus Disease Outbreak, South Korea, 2020" (2020) 26 Emerg Infect Dis 2465 at 2466-2467.

²¹² Charles B Smith, Margaret P Battin, Jay A Jacobson, Leslie P Francis, Jeffrey R Botkin, Emily P Asplund, Gretchen J Domek and Beverly Hawkins "Are there Characteristics of Infectious Diseases that Raise Special Ethical Issues" (2004) 4 Dev World Bioeth 1 at 2.

ignoring the fact that they are legally capable of making their own decision. States should not ignore the rights of children simply because they are inconvenient.²¹³ While the protection of others may justify the limitation of rights, it would not be fair to treat adults and competent children differently, merely because of age. If we believe the threat to the public is great enough to justify overriding the decisions of competent children, then the threat would also be great enough to limit the rights of adults.

VIII How Should the State Implement the Child's Right to Health?

On balance, a state decision to override parental vaccine refusal could be justified on the basis of both individual and collective rights. As discussed in Section VI, if there is a higher degree of potential harm, such an intervention may be more proportionate and easier to justify.

In order to benefit children as a collective, the state would have to create legislation which mandated immunisation in some form. However, just because the state *could* mandate immunisation, does not mean the state *should* mandate immunisation.

This section will discuss two key reasons why a mandatory immunisation policy should not be the state's first approach to implementing the child's right to health in this context. Firstly, the state has an obligation to comprehensively investigate the viability of voluntary immunisation before considering mandatory immunisation. Secondly, the best interests standard suggests that, based on practical implementation issues, mandatory immunisation should only be considered if voluntary immunisation cannot achieve herd immunity.

Following this, it will consider two rights-compliant elements which may contribute towards a more successful voluntary immunisation programme.

A The State's Responsibility

Mandating immunisation may not be an appropriate first step, because under the CRC, the onus is on the state to provide appropriate services.²¹⁴ Voluntary immunisation has so far

²¹³ Freeman, above n 11, at 103; and Hurst Hannum "Reinvigorating Human Rights for the Twenty-First Century" (2016) 16 Hum Rights Law Rev 409 at 439.

²¹⁴ Convention on the Rights of the Child, above n 1, art 24.

failed to achieve the state's 95% immunisation rate goal. However, this does not mean a voluntary immunisation programme is an inherently inappropriate service. Rather, it suggests that the state should approach the implementation of such a programme in a more focused and thorough way. Moreover, the fact that the CRC explicitly references the parent's right to bring up their children,²¹⁵ places a strong duty on the state to do everything it can to successfully implement the right to health without interfering in the family unit. In other words, the state should aim to encourage satisfactory vaccine uptake through voluntary means.

It appears that comprehensive programmes targeting vulnerable communities have been especially lacking. The New Zealand Māori Council has criticised the state for a lack of national immunisation messaging and campaigns, sharing the opinion that "the Ministry is not exactly specifically encouraging parents to immunise children".²¹⁶ Pasifika GP network chairperson Api Talemaitoga also criticised the government's response to the 2019 measles outbreak, stating that health authorities had "a blind spot" in terms of reaching Pacific communities, and believed a measles vaccine catch-up campaign was years overdue.²¹⁷

It appears the state also acknowledges that more must be done to implement the child's right to health in the context of immunisation. In February 2020, the New Zealand government announced a commitment to invest \$23 million dollars into improving the immunisation system, including upgrading the NIR to improve access to immunisation information. Their strategy plans to make immunisation more accessible and deliver services in more localised and innovative ways.²¹⁸

²¹⁵ Convention on the Rights of the Child, above n 1, arts 5 and 18.

²¹⁶ Scoop "Government Response to measles epidemic a national joke" (3 September 2019) Scoop <scoop.co.nz>; and Sun Live "Measles outbreak "not yet at its peak"" *Sun Live* (online ed, 3 September 2019).

²¹⁷ Rowan Quinn "Measles vaccine catch-up 'too late', doctor says" *RNZ* (online ed, New Zealand, 31 July 2020).

²¹⁸ Julie Anne Genter "Strengthening New Zealand's Immunisation System" (10 February 2020) <beehive.gov.nz>.

This increased state focus may go a long way towards more successfully implementing the child's right to health by counteracting barriers to immunisation and delivering more effective and targeted health interventions. It is in children's best interests to assess what effect this renewed state attention and increased funding have on immunisation levels before more coercive approaches are considered.

B Practical Issues with Mandating Immunisation

Another reason why mandatory immunisation should not be the state's first response, is the fact that there are practical issues associated with its implementation. The right to health does not exist in isolation and must be interpreted in light of other rights in the CRC, particularly the child's right for their best interests to be a primary consideration.²¹⁹ It is important that before adopting a measure of implementation, that the state considers its potential impact on children's rights. To this effect, the Committee recommends the state conduct a child-rights assessment (CRIA) to predict such impacts.²²⁰

This subsection will discuss four practical issues associated with mandating immunisation which might be considered during a CRIA because they raise best interests questions.

1 History of Forced Treatment for Indigenous and Disabled Communities

The adoption of mandatory immunisation as a first response may not be in certain children's best interests because it risks damaging the state's already fragile relationship with certain communities. Internationally, indigenous people and people with disabilities have suffered trauma as a result of forced treatment,²²¹ including reproductive coercion,²²²

²¹⁹ Committee on the Rights of the Child, above n 31, at [12]-[15].

²²⁰ Committee on the Rights of the Child, above n 29, at [99].

²²¹ Paul Steven Miller and Rebecca Leah Levine "Avoiding genetic genocide: understanding good intentions and eugenics in the complex dialogue between the medical and disability communities" (2103) 15 *Genet Med* 95 at 96.

²²² Irmo Marini "The History of Treatment Toward People with Disabilities" in Irmo Marini, Noreen M Graf, Michael J Millington (eds) *Psychosocial Aspects of Disability* (Bang Printing, United States, 2017) at 3; and Patricia J Rock "Eugenics and Euthanasia: A cause for concern for disabled people, particularly disabled women" (1996) 11 *Disabil Soc* 121 at 123.

and medical experimentation,²²³ at the hands of the state and the medical system. This is not purely a historical phenomenon. Allegations made in September 2020 claim that undocumented migrant women held at detention centres in the United States were subjected to unnecessary and non-consensual hysterectomies.²²⁴

While immunisation may seem totally removed from procedures like forced sterilisation, it is still a medical procedure which violates bodily autonomy, and while there is a general medical consensus that immunisation is safe, effective, and in most people's best interests,²²⁵ many unethical things have been done to vulnerable people in the name of best interests. Placing already victimised communities in a position where they must comply with medical treatment or potentially face a penalty raises ethical issues.

Research suggests that trust is an important part of encouraging immunisation, and it is important to maintain this trust.²²⁶ Seeking to mandate medical treatment for communities who may already be suspicious of the use of power in this context may increase levels of mistrust and damage faith in the medical system, ultimately causing harm to children.

2 *Increased Vaccine Resistance*

A further issue with choosing to mandate immunisation, is the possibility that this may lead to increased resistance from the public.²²⁷ The theory of reactance suggests that measures

²²³ Barbara Faye Waxman "Hatred: The Unacknowledged Dimension in Violence Against Disabled People" (1991) 9 Sex Disabil 185 at 189; James P Caruso and Jason P Sheehan "Psychosurgery, ethics, and media: a history of Walter Freeman and the lobotomy" (2017) 43 Neurosurg Focus at 3; Andrew Scull *Psychiatry and Its Discontents* (University of California Press, California, 2019) at 134-137; Katie Dangerfield "Canada subjected Indigenous people to 'cruel' medical experiments, lawsuit claims" *Global News* (online ed, 11 May 2018); and Marcella Alsan and Marianne Wanamaker "Tuskegee and the Health of Black Men" (2018) 133 Q J Econ 497 at 408-409.

²²⁴ Moira Donegan "ICE hysterectomy allegations in line with US's long and racist history of eugenics" *The Guardian* (online ed, 17 September 2020); and Jeanne Lenzer "Mass hysterectomies" were carried out on migrants in US detention centre, claims whistleblower" (2020) 370 BMJ.

²²⁵ CMAJ "Vaccines, values and science" (2019) 191 CMAJ 397 at 397; and Graham Dixon and Christopher Clarke "The effect of falsely balanced reporting of the autism-vaccine controversy on vaccine safety perceptions and behavioral intentions" (2013) 28 Health Educ Res 352 at 352.

²²⁶ Nowlan, above n 49, at 80.

²²⁷ Laura Williamson and Hannah Glaab "Addressing vaccine hesitancy requires an ethically consistent health strategy" (2018) 19 BMC Medical Ethics at 2.

which decrease freedom of choice may operate as a motivator to reassert control over the restricted freedom.²²⁸ In other words, parents may wish to reassert freedom of choice by refusing immunisation.²²⁹ This may include parents who do not oppose immunisation itself but already believe the government interferes too much in their personal freedoms.²³⁰

Moreover, introducing coercive measures may decrease trust in the health system, and may exacerbate existing perceptions that vaccines are dangerous.²³¹ While these perceptions may be counteracted with effective health messaging, it would still be in the child's best interests to avoid straining the already shaky trust that exists between some parents and the health system.

3 Existing Inequities More of a Barrier than Vaccine Refusal

Another reason why mandating immunisation may not be an appropriate first step, is the fact that deliberate vaccine refusal is typically not the primary reason for suboptimal immunisation rates.²³² This means that such a step may fail to address the key reasons why New Zealand children are missing immunisations, and will ultimately fail to meaningfully implement this aspect of the child's right to health.

While views around immunisation have become increasingly polarised, and vaccine scepticism may be rising,²³³ barriers to health services and inequity of access have a more significant impact on immunisation coverage. Poverty and poverty related factors are some

²²⁸ Christina Steindl, Eva Jonas, Sandra Sittenthaler, Eva Traut-Attasch and Jeff Greenberg "Understanding Psychological Reactance: New Developments and Findings" (2015) 223 Z Psychol 205 at 205; and Tobias Reynolds-Tylus "Psychological Reactance and Persuasive Health Communication: A Review of the Literature" (2019) 4 Front Commun at 1-2.

²²⁹ Cornelia Betsch and Robert Böhm "Detrimental effects of introducing partial compulsory vaccination: experimental evidence" (2015) 26 Eur J Public Health 378 at 378.

²³⁰ Isaacs et al, above n 37, at 395; and Isabel Rossen, Mark J Hurlstone, Patrick D Dunlop and Carmen Lawrence "Accepters, fence sitters, or rejecters: Moral profiles of vaccination attitudes" (2019) 224 Soc Sci Med 23 at 24.

²³¹ Isaacs et al, above n 37, at 395; and Nowlan et al, above n 49, at 80.

²³² Frank H Beard, Julie Leask and Peter B McIntyre "No jab, No Pay and vaccine refusal in Australia: the jury is out" (2017) 206 MJA 381 at 383.

²³³ Carol HJ Lees and Chris G Sibley "Attitudes towards vaccinations are becoming more polarized in New Zealand: Findings from a longitudinal survey" (2020) 23 EClinicalMedicine at 5.

of the strongest and most persistent barriers to immunisation.²³⁴ This includes issues relating to transport, insecure housing, low health literacy and difficulty accessing childcare.²³⁵

In New Zealand, Māori children are particularly affected by such barriers. As well as having the poorest average health status of any ethnic group in New Zealand, Māori have some of the lowest rates of immunisation.²³⁶ In 2014, 88.9% of Māori children were immunised at 8-months compared to 91.9% of total New Zealand children.²³⁷

Because only a small percentage of parents actively refuse immunisation, mandating immunisation may not be the most effective way increase overall immunisation rates. Addressing structural and systemic barriers is likely to have more of an impact. Moreover, art 2 of the CRC states that rights must be implemented without discrimination of any kind. Mandating immunisation without addressing access barriers would magnify existing health inequities and would essentially punish Māori for the state's lack of investment in equitable and culturally appropriate services. Therefore, because this policy would specifically disadvantage Māori, it could be considered discriminatory.

4 Financial Penalties Would Likely Increase Inequities

Mandatory immunisation must be accompanied by sanctions for noncompliance, otherwise it would be, in practice, no different to the current situation. However, there is a danger that sanctions would magnify existing inequities and cause harm to the child by increasing the financial burdens of families living in poverty.

²³⁴ Cameron C Grant, Nikki Turner, Deon G York, Felicity Goodyear-Smith and Helen A Petousis-Harris "Factors associated with immunisation coverage and timeliness in New Zealand" (2010) Br J Gen Pract 113 at 119.

²³⁵ Walker et al, above n 187, at 12-16.

²³⁶ Waitangi Tribunal *Hauora Report on Stage One of the Health Services and Outcomes Kaupapa Inquiry* (Wai 2575, 2019) at 96.

²³⁷ Waitangi Tribunal, above n 236, at 24.

In some countries, including Germany, parents who fail to immunise their children are fined.²³⁸ In other countries, such as Australia, immunisation is tied to eligibility for government payments. This approach has been referred to as the “No Jab, No Pay” policy.²³⁹

There is a correlation between vaccine refusal and socioeconomic status.²⁴⁰ International research suggests that parents who actively refuse vaccines are more likely to be white, well-educated, and from a higher socioeconomic status, whereas the parents of under-vaccinated children tend to be non-white, less educated, and from households that are closer to the poverty line.²⁴¹ As a result, financial penalties, especially if they are tied to the receipt of government assistance, are unlikely to have any effect on vaccine refusers,²⁴² and will unfairly harm vulnerable populations who need to be assisted rather than punished.

Because Māori children are statistically more likely to come from a lower socioeconomic household,²⁴³ have some of the lowest immunisation levels,²⁴⁴ and face barriers to access,²⁴⁵ policies like the “No Jab, No Pay” system would disproportionately affect Māori families.

When combined with the access barriers discussed above, mandatory immunisation may exacerbate existing inequity and would essentially punish parents at or close to the poverty

²³⁸ Melissa Eddy “Germany Mandates Measles Vaccine” *New York Times* (online edition, United States, 14 November 2019).

²³⁹ Mallory J Trent, Elissa J Zhang, Abrar Ahmad Chughtai and C Raina MacIntyre “Parental opinions towards the “No Jab, No Pay” policy in Australia” (2019) 37 *Vaccine* 5250 at 5250.

²⁴⁰ Matilda Hamilton, Paul Corwin, Suzanne Gower and Sue Rogers “Why do parents choose not to immunise their children?” (2004) 117 *NZMJ* at 5; and Gillian Eyres White and Alex N Thomson “‘As every good mother should’. Childhood immunization in New Zealand: a qualitative study” (1995) 3 *Health Soc Care* 73 at 79.

²⁴¹ Jackie and Matthews, above n 36, at 2.

²⁴² Beard et al, above n 232, at 383.

²⁴³ Ministry of Health “Socioeconomic indicators” (2 August 2018) Ministry of Health <health.govt.nz>; and Statistics New Zealand “Child poverty statistics: Year ended June 2019” (25 February 2020) Statistics New Zealand <stats.govt.nz>.

²⁴⁴ Waitangi Tribunal, above n 236, at 96.

²⁴⁵ Grant et al, above n 234, at 119.

line while allowing wealthier parents to continue to refuse immunisation.²⁴⁶ Essentially, this creates one law for the rich and another for the poor. Causing economic harm to families living in poverty is not in the child's best interests and does not align with the CRC, as art 4 states that legislative measures must have regard to the child's economic rights.²⁴⁷ This harm will only be exacerbated by the barriers to access discussed above and have the potential to widen existing inequities.

5 *Summary*

Overall, it would be in the child's best interests to avoid implementing a mandatory immunisation programme if a voluntary programme could achieve similar results. Damaging parent's trust in the medical system will not help to protect children's rights to health and access to immunisation. And, if vaccine refusal is not the primary reason for low vaccine uptake in New Zealand, mandating immunisation may only widen social inequity and cause ongoing harm to children without effectively implementing the right to health. The CRC emphasises the importance of the family,²⁴⁸ and at the end of the day, convincing, rather than coercing parents to immunise their children will place less strain on the family, and by extension the child.

C An Improved Voluntary Immunisation Programme

As discussed in subsection A, the state plans to improve its voluntary immunisation programme through the allocation of \$23 million. It is not within the scope of this essay to discuss the minutiae of what an improved programme should look like. Other scholarship has discussed the importance of improving access,²⁴⁹ facilitating early enrolment on

²⁴⁶ Saad B Omer, Cornelia Betsch and Julie Leask "Mandate vaccination with care" (2019) 571 *Nature* 469 at 470.

²⁴⁷ Convention on the Rights of the Child, above n 1, art 4.

²⁴⁸ At preamble, arts 7 and 9.

²⁴⁹ For discussion see Tim Corbett "Recommendations to enhance General Practice to improve access of tamariki to immunisation" (ThinkSpace, New Zealand, 2013); Walker et al, above n 187; and T Boyce, A Gudorf, C de Kat, R Butler and K B Habersaat "Towards equity in immunisation" (2019) 24 *Euro Surveill*.

immunisation registers,²⁵⁰ and conducting recall interventions.²⁵¹ However, it will discuss two factors which align with the CRC and may contribute to a more successful implementation of the right to health in the context of immunisation. Firstly, the provision of targeted and appropriate information, and secondly, investment in and support for Māori scholarship and health practitioners.

1 Information and Engagement with Health Services

The Committee states that part of implementing the right to health involves providing parents and children with appropriate health-related information.²⁵² Moreover, according to art 18 of the CRC, the state has a duty to render appropriate assistance to parents in the performance of their child-rearing responsibilities.²⁵³ For parents, part of this responsibility involves making medical decisions on behalf of their children. The provision of comprehensive immunisation-related information would better assist parents and would help the state to fulfil its obligations under the right to health.²⁵⁴

Article 18 states the child's best interests will be the parents' basic concern.²⁵⁵ However, it is difficult for parents to make decisions in their child's best interests if they do not have adequate access to the relevant facts required to make a well-informed decision. Antenatal decision-making is a strong indicator of early immunisation uptake,²⁵⁶ however, according to a 2015 longitudinal study, up to 56% of pregnant women do not receive information about immunising their child prior to the child's birth.²⁵⁷ There is also evidence that the provision of information is often inconsistent, and in some situations, health professionals

²⁵⁰ For discussion see Grant et al, above n 234.

²⁵¹ For discussion see Tickner et al, above n 39; Heidemarie Holzmann and Ursula Wiedermann "Mandatory vaccination: suited to enhance vaccination coverage in Europe?" (2019) 24 *Euro Surveill*; and Tim Crocker-Buque, Michael Edelstein and Sandra Mounier-Jack "Interventions to reduce inequalities in vaccine uptake in children and adolescents aged <19 years: a systematic review" (2017) 71 *J Epidemiol Community Health* 87.

²⁵² Committee on the Rights of the Child, above n 31, at [58].

²⁵³ Convention on the Rights of the Child, above n 1, art 18(2).

²⁵⁴ Committee on the Rights of the Child, above n 31, at [25], [26] and [61].

²⁵⁵ Convention on the Rights of the Child, above n 1, art 18(1).

²⁵⁶ Nowlan et al, above n 49, at 81.

²⁵⁷ Growing up in New Zealand *Growing Up in New Zealand Policy Brief 6: Who is saying what about immunisation: evidence from Growing Up in New Zealand* (Growing Up in New Zealand, Auckland, 2015).

and antenatal programmes may actually distribute misinformation.²⁵⁸ Gaps in the immunisation knowledge of health professionals also act as a significant barrier to vaccine uptake.²⁵⁹

The provision of information is not likely to sway vaccine refusers as such groups often have strong cognitive biases, leading them to reject contradictory information.²⁶⁰ Because the state's goal is to increase rates enough to secure herd immunity, information should be targeted at fence-sitters and other people who could still be convinced to immunise.

A vital part of implementing the child's right to health in the context of immunisation involves ensuring all healthcare professionals receive ongoing training on how to provide parents with accurate, relevant, and consistent information.²⁶¹ Information must also be comprehensive and should actively engage with parental concerns, as this is linked with a higher likelihood of timely immunisation in comparison with the provision of only basic information.²⁶²

It is also important that information-based interventions for high risk groups are specifically tailored, as such interventions have a higher chance of success. In the Māori context, it is important to remember that there are differences between Pākehā concepts of family and wider Māori relationship concepts like *whānau* and *iwi*. It is also important to note that involving well-respected religious and cultural leaders in the promotion of

²⁵⁸ Growing up in New Zealand, above n 257; Helen Petousis-Harris, Felicity Goodyear-Smith, Nikki Turner and Ben Soe "Family physician perspectives on barriers to childhood immunisation" (2004) 22 Vaccine 2340 at 2341; and Helen Petousis-Harris, Elaine Boyd and Nikki Turner "Immunisation education in the antenatal period" (2004) 31 NZFP 303 at 304.

²⁵⁹ Petousis-Harris et al, above n 258, at 2343.

²⁶⁰ Marina Voinson, Sylvain Billiard and Alexandara Alvergne "Beyond Rational Decision-Making: Modelling the Influences of Cognitive Biases on the Dynamics of Vaccination Coverage" (2015) PLOS ONE at 3 and 12; Corine S Meppelink, Edith G Smit, Marieke L Fransen and Nicola Diviani "'I was Right about Vaccination': Confirmation Bias and Health Literacy in Online Health Information Seeking" (2019) 24 J Health Commun 129 at 137; Matthew J Hornsey, Emily A Harris and Kelly S Fielding "The Psychological Roots of Anti-Vaccination Attitudes: A 24-Nation Investigation" (2018) 37 Health Psychol 307 at 308; and Rossen et al, above n 230, at 24.

²⁶¹ Lamiya Samad, Neville Butler, Catherine Peckham and Helen Bedford "Incomplete immunisation uptake in infancy: Maternal reasons" (2006) 24 Vaccine 6823 at 6828.

²⁶² Abigail L Wroe, Nikki Turner and R Glynn Owens "Evaluation of a Decision-Making Aid for Parents Regarding Childhood Immunizations" (2005) 24 Health Psychol 539 at 539 and 545.

immunisation may be an effective way of increasing vaccine uptake within communities.²⁶³

As well as engaging in public health messaging, is also important to invest in ensuring that information provided by health professionals, including midwives is of a high standard and consistent across all provider groups. Some parents may perceive information directly from the government as biased,²⁶⁴ whereas health professionals are a key and trusted source of immunisation information for parents.²⁶⁵ A study by Freed et al found that 76% of participants placed a lot of trust in their child's doctor, while only 23% placed a lot of trust in government experts.²⁶⁶

Overall, it is not enough to simply make information available to parents who search for it. To fulfil its obligations under arts 18 and 24, the state should actively provide targeted and appropriate information, especially to vulnerable groups. The best way to uphold the child's right to health in this context is to help parents to perceive immunisation as a safe and important option for their child.

2 *Investing in Māori Research and Health Practitioners*

Māori children have some of the lowest rates of immunisation,²⁶⁷ and face barriers to access.²⁶⁸ When read in connection with art 2, it is apparent the right to health must be implemented in an equitable way. The Committee describes the obligation to implement the right to non-discrimination as non-passive. It involves ensuring effective opportunities for rights enjoyment for all children and may require positive measures to address

²⁶³ Diane S Saint-Victor and Saad B Omer "Vaccine Refusal and the endgame: walking the last mile first" (2013) 368 Phil Trans R Soc B at 7.

²⁶⁴ Hamilton, above n 240, at 1.

²⁶⁵ Carol Lee, Isabelle Duck and Chris G Sibley "Confidence in the safety of standard childhood vaccinations among New Zealand health professionals" (2018) 131 NZMJ 60 at 65.

²⁶⁶ Gary L Freed, Sarah J Clark, Amy T Butchart, Dianne C Singer and Matthew M Davis "Sources and Perceived Credibility of Vaccine-Safety Information for Parents" (2011) 127 Pediatrics 107 at 109.

²⁶⁷ Waitangi Tribunal, above 236, at 96.

²⁶⁸ Rebekah Graham and Bridgette Masters-Awatere "Experiences of Māori of Aotearoa New Zealand's public health system: a systematic review of two decades of published qualitative research" (2020) 44 ANZJPH 193 at 193; Walker et al, above n 187, at 12-16; and Grant et al, above n 234, at 119.

inequality.²⁶⁹ The Committee also states that efforts to implement the right to health should focus on children in disadvantaged or under-served areas.²⁷⁰ The state is also obliged to fulfil the principle of equity as part of the specific obligations it owes to Māori children under Te Tiriti o Waitangi.²⁷¹

Interventions are more likely to be effective if they are locally designed and targeted.²⁷² This means that investment in Māori-led, Māori-focused research, and the development of Māori-led, Māori-targeted interventions should be a priority. Engaging in partnership and consultation with Māori to achieve this is part of the state's duty as a good faith Treaty partner.²⁷³ Without such an investment, the state will have difficulty fulfilling its obligations to implement the child's right to health in an equitable way.

The involvement of members of a targeted community as front-line workers is also a key factor associated with successful health interventions.²⁷⁴ Māori patients often report feeling more understood by and having more whanaungatanga or connection with Māori health providers.²⁷⁵ However, Māori are currently underrepresented in most health professions, including as nurses and doctors.²⁷⁶ Boosting numbers of Māori health

²⁶⁹ Committee on the Rights of the Child, above n 29, at [41].

²⁷⁰ Committee on the Rights of the Child, above n 31, at [11].

²⁷¹ Waitangi Tribunal *The Napier Hospital and Health Services Report* (Wai 692, 2002) at at xxvii and 64.

²⁷² Crocker-Buque et al, above n 251, at 95.

²⁷³ Waitangi Tribunal, above n 271, at 72; Waitangi Tribunal *Report of the Waitangi Tribunal on Claims Concerning the Allocation of Radio Frequencies* (Wai 150, 1990) at 44; and *New Zealand Māori Council v Attorney-General (Lands)* [1987] 1 NZLR 641 at 683.

²⁷⁴ Susan Bidwell "Improving access to primary health care for children and youth: a review of the literature for the Canterbury Clinical network Child and Youth Workstream" (Canterbury District Health Board, Christchurch, 2013) at 2; Nowlan et al, above n 49, at 80; and Lis Ellison-Loschmann and Neil Pearce "Improving Access to Health Care Among New Zealand's Māori Population" (2006) 96 Am J Public Health 612 at 615.

²⁷⁵ Rebekah Graham and Bridgette Masters-Awatere "Experiences of Māori of Aotearoa New Zealand's public health system: a systematic review of two decades of published qualitative research" (2020) 44 ANZJPH 193 at 198; and Tania Slater, Anna Matheson, Cheryl Davies, Huia Tavite, Triny Ruhe, Maureen Holdaway and Lis Ellison-Loschmann "It's whanaungatanga and all that kind of stuff": Māori cancer patient's experiences of health services" (2013) 5 J Prim Health Care 308 at 310.

²⁷⁶ Health Quality and Safety Commission *He matapihi ki te kounga o ngā manaakitanga ā-hauora o Aotearoa 2019 – A window on the quality of Aotearoa New Zealand's health care 2019* (Health Quality & Safety Commission, Wellington, 2019) at 55.

professionals is an important aspect of implementing the child's right to health in New Zealand, in the context of immunisation and more generally.

For Māori children, access to the highest attainable standard of health means equitable access to culturally appropriate services. Investing in the creation of such services is an important part of implementing this right. If whānau feel comfortable during interactions with health services, this will encourage ongoing positive attitudes towards immunisation,²⁷⁷ which will go a long way towards facilitating the realisation of this right.

IX Mandating Immunisation

As outlined in Section VIII, mandatory immunisation has associated dangers. However, because immunisation forms a part of the child's right to health, if a voluntary immunisation programme fails to meaningfully increase immunisation uptake, then mandating immunisation may be required to implement this right. In General Comment No. 15, the Committee states that amending laws where necessary is a core obligation under the right to health.²⁷⁸

At the end of the day, the state has the power to mandate immunisation in order to protect the rights of children. This idea is hardly novel, as immunisations are mandatory in several countries.²⁷⁹ Many things are mandated by law, removing the parental right to make choices. For example, parents are required, by law, to register the birth of their child,²⁸⁰ even though some may consider this an invasion into their private lives.

A Evidence of Efficacy

The Committee states that interventions seeking to implement the right to health should be evidence-based.²⁸¹ So, is there evidence that mandatory immunisation can be effective? Evidence from several countries, including the United States and Italy suggest that the

²⁷⁷ Corbett, above n 249, at 8.

²⁷⁸ Committee on the Rights of the Child, above n 31, at [73].

²⁷⁹ Katie Attwell, Shevaun Drislane and Julie Leask "Mandatory vaccination and no fault vaccine injury compensation schemes: An identification of country-level policies: (2019) 37 Vaccine 2843 at 2845.

²⁸⁰ Births, Deaths, Marriages, and Relationships Registration Act 1995, s 5.

²⁸¹ Committee on the Rights of the Child, above n 31, at [116].

implementation of mandatory immunisation policy can help to increase immunisation levels, both in the short and long term, especially if accompanied by thorough and high-profile information campaigns.²⁸² Importantly, mandating immunisation also sends a clear message of the state's stance on immunisation and may help to establish immunisation as a compelling social norm.²⁸³

B Realistic Goals

The Committee states that the child's best interests should be placed at the centre of all policies designed to implement the right to health.²⁸⁴ This means that when it comes to implementing the right to health, it may be necessary to establish realistic goals, rather than chasing idealistic aspirations at the expense of other rights.

The danger, as with any hard-line approach is that the state may inadvertently cause harm to children in the process of trying to protect rights. It is possible to implement a right too zealously and without considering its interaction with other rights. As such, a policy which sought to immunise all children without medical exemptions would neither be practical or in the child's best interests. It is hard to see how such a goal could be achieved short of separating children from their parents and forcibly immunising them. Unless, as in *Capital and Coast District Health Board*,²⁸⁵ a child is in danger of immediate and imminent physical harm, the trauma caused by such a policy would likely outweigh the benefits of immunisation.

Herd immunity protects children by making it hard for diseases to spread easily within the community.²⁸⁶ Therefore, as long as immunisation levels are high enough to maintain herd

²⁸² Daniel Lévy-Bruhl, Laure Fonteneau, Sophie Vaux, Anne-Sophie Barret, Denise Antona, Isabelle Bonmarin, Didier Che, Sylvie Quelet and Bruno Coignard "Assessment of the impact of the extension of vaccination mandates on vaccine coverage after 1 year, France, 2019" (2019) 24 Euro Surveill at 1; and Fortunato D'Acona, Claudio D'Amario, Francesco Maraglino, Giovanni Rezza and Stefania Iannazzo "The law on compulsory vaccination in Italy: an update 2 years after the introduction" (2019) 24 Euro Surveill at 3.

²⁸³ Pierik, above n 37, at 394; and Lévy-Bruhl et al, above n 282, at 1.

²⁸⁴ Committee on the Rights of the Child, above n 31, at [13].

²⁸⁵ *Capital and Coast District Health Board v DRB*, above n 55.

²⁸⁶ Isaacs et al, above n 37, at 393.

immunity, the child's right to health will be adequately implemented.²⁸⁷ Immunisation provides more reliable protection, however, as discussed in the prior section, an overly rigid interpretation of the right to health may not be in a child's best interests. For this reason, permitting some leeway for staunchly anti-vaccination parents may be the lesser of two evils. The key is to find a balance between the rights of the parent, the rights of the child, and the collective rights of the wider community.

C Finding a Balance

This section will discuss three possible aspects of a mandatory immunisation programme which may achieve a better balance of rights than a strictly applied policy which only permits medical-based exemptions.

1 Linking Access to Services to Immunisation Status

By linking the ability to access certain goods like passports and enrolment in a public school to immunisation status, the state could enforce immunisation without actually mandating immunisation. Such an approach acknowledges that parents have the right to raise their child according to their perception of the good life,²⁸⁸ but at the same time fulfils the state's obligation to implement measures which protect the health rights of children and the collective.²⁸⁹

However, it is also necessary to consider how the right to health may affect other rights, namely, the right to education.²⁹⁰ Tying immunisation status to school entry would limit the education rights of unimmunised children who do not have a medical exemption. However, it would help to implement the education rights of children who cannot be immunised for medical reasons, and who are often prevented from attending school due to the presence of unimmunised children.²⁹¹ Obviously, there is a conflict, not only between

²⁸⁷ Pierik, above n 37, at 389.

²⁸⁸ Pierik, above n 37, at 385

²⁸⁹ Convention on the Rights of the Child, above n 1, art 24; Thomas et al, above n 171, at 1057; and International Covenant on Economic, Social, and Cultural Rights, above n 171, art 12.

²⁹⁰ Convention on the Rights of the Child, above n 1, art 28.

²⁹¹ Silvana Acquafredda and Silvio Tafuri "My son cannot attend the school because 5 classmates are unvaccinated." On the question of compulsory vaccinations and the risk for immune-compromised children

the right to health and the right to education, but the education rights of two groups of children.

Home-schooling is legal in New Zealand,²⁹² meaning unimmunised children would not be deprived of their right to education. Moreover, as Silverman et al argue in the context of United States disability rights legislation, the state would not be failing to implement the child's right to education. Rather, because it is the parents who decide whether their child is immunised, they are the "causal agent" in their child's inability to access a service, in this case school admission.²⁹³ When it comes down to it, children without medical exemptions can easily become immunised and attend school, whereas, if the situation were reversed, there is nothing children with medical exemptions can do to be safe apart from staying at home.

2 *Allowing Non-medical Exemptions*

Another option is to mandate immunisation but allow parents to apply for religious or philosophical-based exemptions. This would balance competing rights by allowing parents to retain the right to make choices on their child's behalf, while still taking a proactive approach to implementing the right to health, by compelling parents to make the effort to actively opt-out of immunisation. This recognises the importance the CRC places on the parent child relationship and helps to mitigate tension by nudging rather than coercing parents towards immunisation.²⁹⁴

Setting immunisation as a default which must be opted out of has the potential to be a reasonably effective way of implementing the immunisation aspect of the child's right to health. Some parents may find the choice to immunise overwhelming, but might find it

into the schools: the case of paediatric cancer patients" (2019) 15 Hum Vaccin Immunother 643 at 64-644; and Ministry of Health *Protecting Children with Cancer from Measles* (Ministry of Health, Wellington, 2012) at 5.

²⁹² Education and Training Act 2020, s 38.

²⁹³ Ross D Silverman and Wendy F Hensel "Squaring State Child Vaccine Policy with Individual Rights Under the Individuals with Disabilities Education Act: Questions Raised in California" (2017) 132 Public Health Rep 593 at 595.

²⁹⁴ Gretchen B Chapman, Meng Li, Helen Colby and Haewon Yoon "Opting in vs Opting Out of Influenza Vaccination" (2010) 304 JAMA 43 at 43.

easier to accept immunisation if it is the default.²⁹⁵ This taps into omission bias, whereby people are more afraid of actively choosing a bad option than passively not choosing a better option.²⁹⁶ People may also be less likely to change from the default because doing so requires more effort than maintaining the status quo.²⁹⁷ The impact of implementing an opt-out system has been studied in the context of organ donation, where opt-out systems appeared to lead to higher rates of post-mortem organ donation than opt-in systems.²⁹⁸ A 2010 study also found that when people were automatically scheduled for flu shot appointments, meaning they were asked to opt-out rather than opt-in, the probability an individual would be immunised increased.²⁹⁹

Practical barriers such as the requirement to complete a form increase the influence of default options.³⁰⁰ The complexity of seeking an exemption directly affects the number of parents who seek exemptions.³⁰¹ In the United States, states with a more involved exemption process had far lower exemption rates than states which only required parents to check a box.³⁰² This would be a relevant factor for limiting the amount of exemptions likely to be applied for.

²⁹⁵ Pierik, above n 37, at 394-395.

²⁹⁶ Scott D Halpern, Peter A Ubel and David A Asch "Harnessing the Power of Default Options to Improve Health Care" (2007) 357 N Engl J Med 1340 at 1340-1341.

²⁹⁷ Eric Johnson and Daniel Goldstein "Do Defaults Save Lives?" (2003) 302 Science 1338 at 1338.

²⁹⁸ Lee Shepherd, Ronan E O'Carroll and Eamonn Ferguson "An international comparison of deceased and living organ donation/transplant rates opt-in and opt-out systems: a panel study" (2014) 12 BMC Medicine at 2-4; Murat Civaner, Zümrüt Alpinar and Yaman Örs "Why Would Opt-Out System for Organ Procurement Be Fairer?" (2010) 50 Synth Philos 367 at 371; Danielle Hamm and Juliet Tizzard "Presumed consent for organ donation" (2008) 336 BMJ 230 at 230; Alberto Abadie and Sebastien Gay "The impact of presumed consent legislation on cadaveric organ donation: A cross-country study" (2006) 25 J Health Econ 599 at 600 and 613; and Ronald W Gimbel, Martin A Strosberg, Susan E Lehrman, Eugenijus Gefenas and Frank Taft "Presumed consent and other predictors of cadaveric organ donation in Europe" (2003) 13 Prog Transplant 17 at 22.

²⁹⁹ Chapman et al, above n 294, at 44.

³⁰⁰ Halpern et al, above n 296, at 1342.

³⁰¹ Lobo, above n 38, at 277.

³⁰² Anthony Ciolli "Mandatory School Vaccinations: The Role of Tort Law" (2008) 81 Yale J Biol Med 129 at 131; and Jennifer S Rota, Daniel A Salmon, Lance E Rodewald, Robert T Chen, Beth F Hibbs and Eugene J Gangarosa "Processes for Obtaining Nonmedical Exemptions to State Immunization Laws" (2001) 91 Am J Public Health 645 at 647.

When religious and philosophical exemptions are permitted, more exemptions are applied for and there is a greater risk of disease outbreak.³⁰³ However, based on issues which can accompany mandatory immunisation and the danger that an overly strict approach could harm the parent-child relationship, it is overall in the child's best interests to allow such exemptions, as opposed to only permitting medical exemptions.

3 Mandating Immunisation During Outbreaks

The third option would involve retaining voluntary immunisation, with the ability to implement regional mandates when disease outbreaks occur or are in imminent danger of occurring.³⁰⁴ This policy draws on the harm principle and the principle of proportionality, suggesting that while herd immunity remains stable, children are not directly in danger, and there is no need to override the parental right to make medical decisions on their child's behalf.

While this is certainly a viable option, in terms of the child's best interests it is less convincing than the other two options discussed above. If the point is to prevent poor health outcomes, then waiting until an outbreak actually occurs, or may imminently occur would be leaving things too late.

However, the ability to mandate immunisation during times of crisis would do more to secure the child's right to health than the current system, which only allows children to be excluded from schools during outbreaks for their own protection. The infection rates during the 2019-2020 measles epidemic show that this alone is not enough to protect the child's right to health.

D Summary

The specific details of a mandatory immunisation policy would have to be fleshed out through a detailed policy options process. However, a brief discussion suggests that while mandatory immunisation may be justified and indeed necessary to implement the right to health in the context of immunisation, it may also be necessary to allow parents to retain

³⁰³ Olive et al, above n 174, at 5-6; and Omer et al, above n 142, at 1983-1984.

³⁰⁴ Pierik, above n 104, at 10.

some degree of decision-making ability. At the end of the day, if children's health rights are likely to be sufficiently protected through herd immunity, it is in the child's best interests not to place undue strain on the parent-child relationship.

X Conclusion

Under article 24 of the Convention on the Rights of the Child, children are guaranteed the right to the enjoyment of the "highest attainable standard of health". The prevention of disease through immunisation (due to both individual protection and the phenomenon of herd immunity) forms a key part of the child's right to health in contemporary New Zealand. The CRC places a serious duty on ratifying states to turn their best efforts towards implementing this right.

It is clear that the child's right to health is not adequately implemented under current New Zealand immunisation policy. Whether children are not immunised due to parental vaccine refusal or because of access barriers, the outcome is the same. New Zealand's vaccine uptake levels are too low to adequately protect children from the danger of outbreaks. This danger was brought into sharp focus when the 2019 measles epidemic infected thousands of people in New Zealand, before spreading to our Pacific neighbours where it killed 83 people in Samoa.

Medical scientific evidence indicates that vaccines are safe and effective. There is no reason why a child living in New Zealand in 2020 should have to risk the harm which would result from catching a preventable disease when a vaccine is freely available. If this does happen, can it really be said that child has enjoyed the highest attainable standard of health?

The state has an obligation to respond to this in some way. The question becomes, should this response involve mandating immunisation? The ongoing COVID-19 pandemic makes this question especially salient, because while it is likely that immunisation represents the best way to protect the public against the threat of community transmission, it may be difficult to achieve herd immunity without state intervention.

As discussed in this essay, rights do not exist in isolation. It is possible to try and implement one particular right too zealously, at the expense of other rights. For this reason, while it is not ideal for individual children to remain unimmunised (without a medical reason), if state actions result in immunisation levels which are high enough to consistently maintain herd immunity, then this aspect of the child's right to health will be adequately implemented. It would be preferable if herd immunity could be achieved through voluntary means, as the CRC emphasises the importance of the family, and this would place less strain on the parent-child relationship. However, if a comprehensive and targeted voluntary immunisation programme fails to accomplish this, the state has an obligation to consider mandating immunisation.

Once, smallpox placed the lives of millions of children at risk. Now, thanks to the development of a vaccine and dedicated immunisation programmes, it is a relic of the past. We know that the elimination of infectious diseases is possible, and there is no reason to believe that one day other diseases like measles and polio will live on only as samples in laboratory cold storage. If the state truly dedicates itself towards implementing the child's right to health in New Zealand, a future where children no longer face the danger of these diseases may not be far away.

XI Bibliography

A Cases

1 New Zealand

Alex Stone v Sophie Reader [2016] NZFC 6130.

Auckland Healthcare Services v Liu HC Auckland M812/96, 11 July 1996.

Borrowdale v Director-General of Health [2020] NZHC 2090.

Capital and Coast District Health Board v DRB FAM-2010-085-000595, 26 May 2010.

Moore v Moore, [2014] NZHC 3213, [2015] 2 NZLR 787.

New Zealand Māori Council v Attorney-General (Lands) [1987] 1 NZLR 641.

R v Hansen [2007] NZSC 7, [2007] 3 NZLR 1.

Re J (An Infant): B and B v Director-General of Social Welfare [1996] 2 NZLR 134.

Re SPO FC Wellington FAM-2004-085-1046, 3 November 2005.

2 England and Wales

Gillick v West Norfolk and Wisbech Area Health Authority and another [1985] 3 WLR 830 (HL).

London Borough of Tower Hamlets v MFT (a child) (by the child's guardian) [2020] EWHC 220 (Fam).

Re B (A Child: Immunisation) [2018] EWFC 56.

3 United States

Prince v Commonwealth of Massachusetts 321 US 158 (1944).

B Legislation

Oranga Tamariki Act 1989.

New Zealand Bill of Rights Act 1990.

Births, Deaths, Marriages, and Relationships Registration Act 1995.

Health (Immunisation) Regulations 1995.

Health and Disability Commissioner (Code of Health and Disability Services Consumer's Rights) Regulations 1996.

Care of Children Act 2004.

Education and Training Act 2020.

C Treaties

Convention on the Rights of the Child 1577 UNTS 3 (opened for signature 20 November 1989, entered into force 2 September 1990).

D Books and Chapters in Books

Bruce Abramson "The Invisibility of Children and Adolescents" in Eugene Verhellen (ed) *Monitoring Children's Rights* (Martinus Nijhoff Publishers, Netherlands, 1996) 393.

Andrew Bainham *Children – The Modern Law* (3rd ed, Jordan Publishing Limited, Bristol, 2005).

Margaret P Battin, Leslie P Francis, Jay A Jacobson and Charles B Smith *The Patient as Victim and Vector: Ethics and Infectious Disease* (Oxford University Press, New York, 2009).

Giles Birchley "Harm is all you need? Best interests and disputes about parental decision-making" (2016) 42 J Med Ethics 111.

David R Buchanan “Public Health Interventions: Ethical Implications” in Anna C Mastroianni, Jeffrey P Kahn and Nancy E Klass (eds) *The Oxford Handbook of Public Health Ethics* (Oxford University Press, New York, 2019) 77.

Florian Esser, Meike S Baader, Tanja Betz and Beatrice Hungerland *Reconceptualising agency and childhood: New Perspectives in childhood studies* (Routledge, London, 2016).

Michael Freeman “Why it remains important to take Children's rights seriously” in Jonathan Rix, Melanie Nind, Kieron Sheehy and Katy Simmons (eds) *Equality, Participation and Inclusion 1: Diverse Perspectives* (Routledge, Abingdon, 2010) 99.

Michael Freeman “The Value and Values of Children's Rights” in Antonella Invernizzi (ed) *The Human Rights of Children: From Visions to Implementation* (Routledge, Oxon, 2016).

Jorge E Galva, Christopher Atchinson and Samuel Levey “Public Health Strategy and the Police Powers of the State” (2020) 120 Public Health Rep 20.

Alberto Giubilini *The Ethics of Vaccination* (Palgrave Pivot, Switzerland, 2019).

Lawrence O Gostin and Lesley Stone “Health of the People: The Highest Law?” in Angus Dawson and Marcel Verweij (eds) *Ethics, Prevention and Public Health* (Oxford University Press Inc, New York, 2007) 59.

Katarina Gray-Sharp “Rātou Kāinga: Tino Rangatiratanga and Contemporary Housing Policy” in Veronica MH Tawhai and Katrina Gray-Sharp (eds) “Always Speaking” *The Treaty of Waitangi and Public Policy* (Huia Publishers, Wellington, 2011) 191.

John Holt *Escape from Childhood – The Needs and Rights of Children* (Hazell Watson & Viney Ltd, Aylesbury, 1975).

Allison James and Alan Prout *Constructing and Reconstructing Childhood: Contemporary Issues in the Sociological Study of Childhood* (Routledge, London, 1997).

Bruce Jennings "Public Health and Civic Republicanism: Towards an Alternative Framework for Public Health Ethics" in Angus Dawson and Marcel Verweij (eds) *Ethics, Prevention and Public Health* (Oxford University Press Inc, New York, 2007) 30.

Miodrag A Jovanović *Collective Rights – A Legal Theory* (Cambridge University Press, Cambridge, 2012).

Ursula Kilkelly "The Health Rights of Children" in Jonathan Todres and Shani M King (eds) *The Oxford Handbook of Children's Rights Law* (Oxford University Press, United States, 2020).

John Kleinig *Philosophical Issues in Education* (Biddles Ltd, Guilford and King's Lynn, 1982).

A Knight and A McNaught (eds) *Understanding wellbeing: An introduction for students and practitioners of health and social care* (Lantern Publishing, Banbury, 2011).

Laura Lundy "Implementing the Rights of Young Children – An assessment of the impact of General Comment No. 7 on law and policy on a global scale" in Jane Murray, Beth Blue Swadener and Kylie Smith (eds) *The Routledge International Handbook of Young Children's Rights* (Routledge, Oxon, 2020).

Neil MacCormick "Rights in Legislation" in PMS Hacker and J Raz (eds) *Law, Morality, and Society: Essays in Honour of HLA Hart* (Clarendon Press, Oxford, 1977) 189.

Irmo Marini "The History of Treatment Toward People with Disabilities" in Irmo Marini, Noreen M Graf, Michael J Millington (eds) *Psychosocial Aspects of Disability* (Bang Printing, United States, 2017).

John Stuart Mill *On Liberty and Utilitarianism* (Bantam Books, New York, 1993).

Jane Murray, Beth Blue Swadener and Kylie Smith (eds) *The Routledge International Handbook of Young Children's Rights* (Routledge, Oxon, 2020).

Patrick Parkinson and Judith Cashmore "Children's Participation in Decisions about Parenting Arrangements" in James G Dwyer (ed) *The Oxford Handbook of Children and the Law* (Oxford University Press, New York, 2019) 834.

Philip Recordon "Consent Issues: Intellectual Disability, Mental Illness and Children" in Rebecca Keenan *Health Care and the Law* (5th ed, Thomson Reuters, Wellington, 2016).

Kirsten Sandberg "Children's Right to Protection under the CRC" in Asgeir Falch-Eriksen and Elisabeth Backe-Hansen (eds) *Human Rights in Child Protection: Implications for Professional Practice and Policy* (Palgrave Macmillan, Switzerland, 2018) 15.

Andrew Scull *Psychiatry and Its Discontents* (University of California Press, California, 2019).

Michael Seymour *A Liberal Theory of Collective Rights* (McGill-Queen's University Press, Quebec, 2017).

Eugeen Verhellen "The Convention on the Rights of the Child: Reflections from a historical, social policy and educational perspective" in Wouter Vandenhoe, Ellen Desmet, Didier Reynaert and Sara Lembrechts (eds) *Routledge International Handbook of Children's Rights Studies* (Routledge, London, 2015) 43.

E Journal Articles

Alberto Abadie and Sebastien Gay "The impact of presumed consent legislation on cadaveric organ donation: A cross-country study" (2006) 25 J Health Econ 599.

Silvana Acquafredda and Silvio Tafuri ""My son cannot attend the school because 5 classmates are unvaccinated." On the question of compulsory vaccinations and the risk for immune-compromised children into the schools: the case of paediatric cancer patients" (2019) 15 Hum Vaccin Immunother 643.

Priscilla Alderson "Consent to Children's Surgery and Intensive Medical Treatment" (1990) 17 J Law Soc 52.

Marcella Alsan and Marianne Wanamaker "Tuskegee and the Health of Black Men" (2018) 133 Q J Econ 497.

Priscilla Alderson and Mary Goodwin "Contradictions within concepts of children's competence" (1993) Intl J Child Rts 303.

Angela J Alessandri "Parents know best: Or do they? Treatment refusals in paediatric oncology" (2011) 47 J Paediatr Child Health 628.

Kavita Shah Arora, Jane Morris and Allan J Jacobs "Refusal of Vaccination: A Test to Balance Societal and Individual Interests" (2018) 29 J Clin Ethics 206.

Katie Attwell, Shevaun Drislane and Julie Leask "Mandatory vaccination and no fault vaccine injury compensation schemes: An identification of country-level policies: (2019) 37 Vaccine 2843.

Frank H Beard, Julie Leask and Peter B McIntyre "No jab, No Pay and vaccine refusal in Australia: the jury is out" (2017) 206 MJA 381.

Johan Christiaan Bester "Measles Vaccination is Best for Children: The Argument for Relying on Herd Immunity Fails" (2017) 14 J Bioeth Inqu 375.

Johan Christiaan Bester "The Harm Principle Cannot Replace the Best Interest Standard: Problems With Using the Harm Principle for Medical Decision Making for Children" (2018) 18 Am J Bioeth 9.

Cornelia Betsch and Robert Böhm "Detrimental effects of introducing partial compulsory vaccination: experimental evidence" (2015) 26 Eur J Public Health 378.

Cornelia Betsch, Robert Böhm and Gretchen B Chapman "Using Behavioral Insights to Increase Vaccine Policy Effectiveness" (2015) 2 Policy Insights Behav Brain Sci 61.

Cornelia Betsch, Lars Korn and Cindy Holtman "Don't try to convert the antivaccinators, instead get the fence-sitters" (2015) 12 PNAS 6725.

Lundal Bond and Terry Nolan "Making sense of perceptions of risk of diseases and vaccinations: a qualitative study combining models of health beliefs, decision-making and risk perception" (2011) 11 BMC Pub Health.

Johnathan Bowes "Measles, misinformation, and risk: personal belief exemptions and the MMR vaccine" (2016) J L Biosci 718.

T Boyce, A Gudorf, C de Kat, R Butler and K B Habersaat "Towards equity in immunisation" (2019) 24 Euro Surveill.

Daniel Brieger, Matthew Edwards, Poonam Mudgil and John Whitehall "Knowledge, attitudes and opinions towards measles and the MMR vaccine across two NSW cohorts" (2017) 41 Aust NZ J Publ Heal 641.

Katharine Browne "The Measles and Free Riders: California's Mandatory Vaccination Law" (2016) 25 Camb Q Healthc Ethics 472.

Michael Bryan "Parents as fiduciaries: A special place in equity" (1995) 3 Int J Child Rights 227.

James P Caruso and Jason P Sheehan "Psychosurgery, ethics, and media: a history of Walter Freeman and the lobotomy" (2017) 43 Neurosurg Focus.

Tracey Chantler, Louise Letley, Pauline Paterson, Joanne Yarwood, Vanessa Saliba and Sandra Mounier-Jack "Optimising informed consent in school-based adolescent vaccination programmes in England: A multiple methods analysis" (2019) 37 Vaccine 5218.

Gretchen B Chapman, Meng Li, Helen Colby and Haewon Yoon "Opting in vs Opting Out of Influenza Vaccination" (2010) 304 JAMA 43.

Anthony Ciolli "Mandatory School Vaccinations: The Role of Tort Law" (2008) 81 Yale J Biol Med 129.

Murat Civaner, Zümrüt Alpinar and Yaman Örs "Why Would Opt-Out System for Organ Procurement Be Fairer?" (2010) 50 Synth Philos 367.

Steve Clarke, Alberto Giubilini and Mary Jean Walker "Conscientious Objection to Vaccination" (2017) 31 *Bioethics* 155.

CMAJ "Vaccines, values and science" (2019) 191 CMAJ 397.

Adam T Craig, Anita E Heywood and Heather Worth "Measles epidemic in Samoa and other Pacific islands" (2020) 20 *The Lancet* 273.

Tim Crocker-Buque, Michael Edelstein and Sandra Mounier-Jack "Interventions to reduce inequalities in vaccine uptake in children and adolescents aged <19 years: a systematic review" (2017) 71 *J Epidemiol Community Health* 87.

Fortunato D'Acona, Claudio D'Amario, Francesco Maraglino, Giovanni Rezza and Stefania Iannazzo "The law on compulsory vaccination in Italy: an update 2 years after the introduction" (2019) 24 *Euro Surveill*.

Roberta L DeBiasi, Xiaoyan Song, Meghan Delaney, Michael Bell, Karen Smith, Jay Pershad...David Wessel "Severe Coronavirus Disease-2019 in Children and Young Adults in the Washington, DC, Metropolitan Region" (2020) 233 *J Pediatr* 199.

Douglas S Diekema "Parental Refusals of Medical Treatment: The Harm Principle As Threshold for State Intervention" (2004) 25 *Theor Med* 243.

Douglas Diekema "Revisiting the Best Interest Standard: Uses and Misuses" (2011) 22 *Clin Ethics* 128.

Douglas S Diekema "Personal Belief Exemptions from School Vaccination Requirements" (2013) 35 *Annu Rev Public Health* 275.

Graham Dixon and Christopher Clarke "The effect of falsely balanced reporting of the autism-vaccine controversy on vaccine safety perceptions and behavioral intentions" (2013) 28 *Health Educ Res* 352.

Mark Doherty, Philippe Buchy, Baudouin Standaert, Carlo Giaquinto and David Prado-Cohrs "Vaccine impact: Benefits for human health" (2016) 34 *Vaccine* 6707.

Robin S Downie and Fiona Randall "Parenting and the Best Interests of Minors" (1997) 22 J Med Philos 219.

James F Drane "The Many Faces of Competency" (1985) 15 Hastings Cent Rep 17.

Rebecca Dresser "Standards for Family Decisions: Replacing Best Interests with Harm Prevention" (2003) 3 Am J Bioeth 54.

Rony E Duncan and Susan M Sawyer "Respecting Adolescent's Autonomy (as Long as They Make the Right Choice)" 47 J Adolesc Health 113.

Carolyn Edwards "Is the MMR vaccine safe" (2001) 174 WJM 197.

Lis Ellison-Loschmann and Neil Pearce "Improving Access to Health Care Among New Zealand's Māori Population" (2006) 96 Am J Public Health 612 at 615.

Gillian Eyres White and Alex N Thomson "'As every good mother should'. Childhood immunization in New Zealand: a qualitative study" (1995) 3 Health Soc Care 73.

Tamar Ezer "A Positive Right to Protection for Children" (2004) 7 Yale Hum Rtg & Dev LJ 1.

Jade Michelle Ferguson "Children under the Knife: Current Interests, Future interests, or Parental Interests" (2017) 2 Cambridge L Rev 226.

James E Fielding, Bruce Bolam and Margie H Danchin "Immunisation coverage and socioeconomic status – questioning inequity in the 'No Jab, No Pay' policy" (2017) ANZJPH.

Dennis K Flaherty "The Vaccine-Autism Connection: A Public Health Crisis Caused by Unethical Medical Practices and Fraudulent Science" (2011) 45 Ann Pharmacoth 1302.

Jane Fortin *Children's Rights and the Developing Law* (2nd ed, Cambridge University Press, Cambridge, 2005).

Charles Foster "Harm: as indeterminate as 'best interests', but useful for triage" (2016) 43 J Med Ethics 121.

Gary L Freed, Sarah J Clark, Amy T Butchart, Dianne C Singer and Matthew M Davis "Sources and Perceived Credibility of Vaccine-Safety Information for Parents" (2011) 127 *Pediatrics* 107.

Michael Freeman "Taking Children's Rights More Seriously" (1992) 6 *Int J Law Policy Family* 52.

Michael Freeman "The Best Interests of the Child? Is *The Best Interests of the Child* in the Best Interests of Children?" (1997) 11 *Int J Law Pol Fam* 360.

Benjamin Gardner, Anna Davies, John McAteer and Susan Michie "Beliefs underlying UK parents' views towards MMR promotion intervention: A qualitative study" (2010) 15 *Psychol Health Med* 220.

Sarah Geoghegan, Kevin P O'Callaghan and Paul A Offit "Vaccine Safety: Myths and Misinformation" (2020) 11 *Front Microbiol* at 1.

Ronald W Gimbel, Martin A Strosberg, Susan E Lehrman, Eugenijus Gefenas and Frank Taft "Presumed consent and other predictors of cadaveric organ donation in Europe" (2003) 13 *Prog Transplant* 17.

Alberto Giubilini, Thomas Douglas and Julian Savulescu "The moral obligation to be vaccinated: utilitarianism, contractualism, and collective easy rescue" (2018) 21 *Med Health Care Philos* 547.

Alberto Giubilini and Julian Savulescu "Vaccination, Risks, and Freedom: The Seat Belt Analogy" (2019) *Pub Health Ethics* 237.

Shana Godfred-Cato, Bobbi Bryant, Jessica Leung, Matthew E Oster, Laura Conklin, Joseph Abrams...Ermias Belay "COVID-19-Associated Multisystem Inflammatory Syndrome in Children – United States, March-July 2020" (2020) 69 *MMWR* 1074.

Charitha Gowda and Amanda F Dempsey "The rise (and fall?) of parental vaccine hesitancy" (2013) 9 *Hum Vaccin Immunother* 1755.

Cameron C Grant, Nikki Turner, Deon G York, Felicity Goodyear-Smith and Helen A Petousis-Harris "Factors associated with immunisation coverage and timeliness in New Zealand" (2010) *Br J Gen Pract* 113.

Richard Griffith "What is Gillick competence?" (2016) *12 Hum Vaccin Immunother* 244.

Petronella Grootens-Wiegers, Irma M Hein, Jos M van den Broek and Martine C de Vries "Medical decision-making in children and adolescents: developmental and neuroscientific aspects" (2017) *17 BMC Pediatrics*.

Karin Gross, Karin Hartmann, Elisabeth Zemp and Sonja Merten "'I know it has worked for millions of years': the role of the 'natural' in parental reasoning against child immunisation in a qualitative study in Switzerland" (2015) *15 BMC Pub Health*.

Andrzej Grzybowski, Rafal K Patryn, Jrosław Sak and Anna Zagaia "Vaccination refusal. Autonomy and permitted coercion" (2017) *111 Pathog Glob Health* 200.

Cemal Hüseyin Güvercin and Berna Arda "Parents refusing treatment of the child: A discussion about child's health right and parental paternalism" (2013) *8 Clin Ethics* 52.

Daniel E Hall, Allan V Prochazka and Aaron S Fink "Informed consent for clinical treatment" (2012) *184 CMAJ* 533.

Scott D Halpern, Peter A Ubel and David A Asch "Harnessing the Power of Default Options to Improve Health Care" (2007) *357 N Engl J Med* 1340.

Matilda Hamilton, Paul Corwin, Suzanne Gower and Sue Rogers "Why do parents choose not to immunise their children?" (2004) *117 NZMJ*.

Danielle Hamm and Juliet Tizzard "Presumed consent for organ donation" (2008) *336 BMJ* 230.

Hurst Hannum "Reinvigorating Human Rights for the Twenty-First Century" (2016) *16 Hum Rights Law Rev* 409.

Taylor Heald-Sargent, William J Muller, Xiaotian Zheng, Jason Rippe, Ami B Patel and Larry K Kociolek "Age-Related Differences in Nasopharyngeal Severe Acute Respiratory

Syndrome Coronavirus 2 (SARS-CoV-2) Levels in Patients With Mild to Moderate Coronavirus Disease 2019 (COVID-19)” (2020) 174 JAMA Pediatr 902.

Health Quality and Safety Commission *He matapihi ki te kounga o ngā manaakitanga ā-hauora o Aotearoa 2019 – A window on the quality of Aotearoa New Zealand's health care 2019* (Health Quality & Safety Commission, Wellington, 2019).

Irma M Hein, Pieter W Troost, Alice Broersma, Martine C de Vries, Joost G Daams and Ramón J L Lindaur “Why is it hard to make progress in assessing children's decision-making competence?” (2015) 16 BMC Med Ethics.

Irman M Hein, Martine C De Vries, Pieter W Troost, Gerhen Meynen, Johannes B Van Goudoever and Ramón J L Lindauer “Informed consent instead of assent is appropriate in children from the age of twelve: Policy implications of new findings on children's competence to clinical research” (2015) 15 BMC Med Ethics.

F M Hodges, J S Svoboda and R S Howe “Prophylactic Interventions on Children: Balancing Human Rights with Public Health” (2002) 28 J Med Ethics 10.

Heidemarie Holzmann and Ursula Wiedermann “Mandatory vaccination: suited to enhance vaccination coverage in Europe?” (2019) 24 Euro Surveill.

Zachary Horne, Derek Powell, John E Hummel and Keith J Holyoak “Countering antivaccination attitudes” (2015) 112 PNAS 10321.

Matthew J Hornsey, Emily A Harris and Kelly S Fielding “The Psychological Roots of Anti-Vaccination Attitudes: A 24-Nation Investigation” (2018) 37 Health Psychol 307.

Jingyi Huang “Beings and Becoming: The Implication of Different Conceptualizations of Children and Childhood in Education” (2019) 10 CJNSE 99.

Yoko Ibuka, Meng Li, Jeffrey Vietri, Gretchen B Chapman and Alison P Galvani “Free-Riding Behavior in Vaccination Decisions: An Experimental Study” (2014) 1 PLOS ONE 1.

D Isaacs, HA Kilham and H Marshall "Should routine childhood immunizations be compulsory" (2004) 40 J Paediatr Child Health 392.

Eric Johnson and Daniel Goldstein "Do Defaults Save Lives?" (2003) 302 Science 1338.

Aviva L Katz and Sally A Webb "Informed Consent in Decision-Making in Pediatric Practice" (2016) 138 Pediatrics.

Jessica Kerr "Immunisation and the Law. Slippery Slope to a Health Society" (2006) 37 VUWLR 93 at 101.

Kristin C Klein and Emily B Diehl "Relationship Between MMR Vaccine and Autism" (2004) 38 Ann Pharmacother 1297.

Michael Koelch and Joerg M Fegert "Ethics in child and adolescent psychiatric care: An international perspective" (2010) 22 Int Rev Psychiatry 258.

Jasper Krommendijk "The domestic effectiveness of international human rights monitoring in established democracies. The case of the UN human rights treaty bodies" (2015) 10 Rev Int Organ 489 at 505.

Vincent La Placa, Allan McNaught and Anneyce Knight "Discourse on wellbeing in research and practice" (2013) 3 IJW 116.

Julie Leask "Target the fence-sitters" (2011) 473 Nature 433.

Carol Lee, Isabelle Duck and Chris G Sibley "Confidence in the safety of standard childhood vaccinations among New Zealand health professionals" (2018) 131 NZMJ 60.

Cecilia Lee and Joan L Robinson "Systematic review of the effect of immunization mandates on uptake of routine childhood immunizations" (2016) 72 J Infect 659.

Carol HJ Lees and Chris G Sibley "Attitudes towards vaccinations are becoming more polarized in New Zealand: Findings from a longitudinal survey" (2020) 23 EClinicalMedicine.

Jeanne Lenzer “Mass hysterectomies” were carried out on migrants in US detention centre, claims whistleblower” (2020) 370 BMJ.

Daniel Lévy-Bruhl, Laure Fonteneau, Sophie Vaux, Anne-Sophie Barret, Denise Antona, Isabelle Bonmarin, Didier Che, Sylvie Quelet and Bruno Coignard “Assessment of the impact of the extension of vaccination mandates on vaccine coverage after 1 year, France, 2019” (2019) 24 Euro Surveill.

Rupali Jayant Limaye, Molly Sauer, Joseph Ali, Justin Bernstein, Brian Wahl, Anne Barnhill and Alain Labrique “Building trust while influencing COVID-19 content in the social media world” (2020) 2 The Lancet 277.

James Lobo “Vindicating the Vaccine: Injecting Strength into Mandatory School Vaccination requirements to Safeguard the Public Health” (2016) 57 BCL Rev 261.

Laura Lundy “‘Voice’ is not enough: conceptualising Article 12 of the United Nations Convention on the Rights of the Child” (2007) 33 Br Educ Res J 927.

Lisa Mackay, Victoria Egli, Laura-Jane Booker and Kate Prendergast “New Zealand’s engagement with the Five Ways to Wellbeing: evidence from a large cross-sectional survey” (2019) 14 Kōtuitui 230.

Annamari Makela, J Pekka Nuorti and Heikki Peltola “Neurologic disorders after measles-mumps-rubella vaccination” (2002) 110 Pediatrics 957.

Glenis Mark, Kerry Chamberlain and Amohia Boulton “Acknowledging the Māori Cultural Values and Beliefs Embedded in Rongoā Māori Healing” (2017) 12 Int J Indig Health 75.

Kathryn McLean “Children and Competence to Consent: Gillick Guiding Medical Treatment in New Zealand” (2000) 31 VUWLR 551.

Benjamin Mason Meier “The Highest Attainable Standard: Advancing a Collective Human Right to Public Health” (2005) 37 Colum Hum Rts L Rev 101.

Gary Melton "Children's Rights: Where Are the Children?" (1982) 52 Am J Orthopsychiatry 530.

Corine S Meppelink, Edith G Smit, Marieke L Fransen and Nicola Diviani "'I was Right about Vaccination': Confirmation Bias and Health Literacy in Online Health Information Seeking" (2019) 24 J Health Commun 129.

Fiona Miller "Wake up COCA! Give children the right to consent to medical treatment" (2011) NZFLJ 85.

Paul Steven Miller and Rebecca Leah Levine "Avoiding genetic genocide: understanding good intentions and eugenics in the complex dialogue between the medical and disability communities" (2103) 15 Genet Med 95.

Martha Minow "Rights for the Next Generation: A Feminist Approach to Children's Rights" (1986) 9 Harv Women's LJ 1.

Johannes Mischlinger, Riko Muranaka, Silja Buhler and Michael Ramharter "Measles, Vaccines, and Types of Perception Bias in Public Debates" (2020) 70 CID 1258.

Jonathan Montgomery "Children as Property" (1988) 51 Mod L Rev 323.

Tamar Morag "The Principles of the UN Convention on the Rights of the Child and Their Influence on Israeli Law" (2014) 22 Mich State Int Law Rev 531.

Dorota Mrozek-Budzyn, Agnieszka Kieltyka and Renata Magewska "Lack of association between measles-mumps-rubella vaccination and autism in children: a case-control study" (2010) 29 Pediatr Infect Dis J 397.

Steffan Mueller, Daniel J Exeter, Helen Petousis-Harris, David O'Sullivan and Christoph D Buck "Measuring disparities in immunization coverage among children in New Zealand" (2012) 18 Health Place 1217.

Chantelle Murley "Does the Gillick competency test apply in New Zealand, given the special nature of sexual health care services?" (2013) 1 PILJNZ 92.

Mary Nowlan, Esther Willing and Nikki Turner “Influences and policies that affect immunisation coverage – a summary review of literature” (2019) 132 NZMJ 79.

Jacqueline K Olive, Peter J Hotez, Ashish Damania and Melissa S Nolan “The state of the antivaccine movement in the United States: A focused examination of nonmedical exemptions in states and counties” (2018) 15 PLoS Med.

Saad B Omer, Cornelia Betsch and Julie Leask “Mandate vaccination with care” (2019) 571 Nature 469.

Saad B Omer, Daniel A Salmon, Walter A Orenstein, Patricia DeHart and Neal Halsey “Vaccine Refusal, Mandatory Immunization, and the Risks of Vaccine-Preventable Diseases” (2009) 360 N Engl J Med 1981.

Onora O'Neill “Children's Rights and Children's Lives” (1992) 6 Intl JL & Fam 24.

Walter A Orenstein and Rafi Ahmed “Simply put: Vaccination saves lives” (2017) 114 PNAS 4031.

Alicia Ouellette “Shaping Parental Authority over Children's Bodies” (2010) 85 Ind LJ 955.

Erin M Page “Balancing Individual Rights and Public Health Safety During Quarantine: The US and Canada” (2007) 38 Case W Res J Intl L 517.

Young Jook Park, Young June Choe, Ok Park, Shin Young Park, Young-Man Kim, Jieun Kim, Sanghui Kweon, Yeohee Woo...and Eun Kyeong Jeong “Contact Tracing during Coronavirus Disease Outbreak, South Korea, 2020” (2020) 26 Emerg Infect Dis 2465.

Gordana Pelčić, Silvana Karačić, Galina L Mikirtichan, Olga I Kubar, Frank J Leavitt, Michael Cheng-tek Tai, Naoki Morishita, Suzana Vuletić and Luka Tomašević “Religious exception for vaccination or religious excuses for avoiding vaccination” (2016) 57 Croat Med J 516.

Helen Petousis-Harris, Elaine Boyd and Nikki Turner “Immunisation education in the antenatal period” (2004) 31 NZFP 303.

Helen Petousis-Harris, Felicity Goodyear-Smith, Sue Godinet and Nikki Turner "Barriers to childhood immunisation among New Zealand mothers" (2002) 29 NZFP 396.

Helen Petousis-Harris, Felicity Goodyear-Smith, Nikki Turner and Ben Soe "Family physician perspectives on barriers to childhood immunisation" (2004) 22 Vaccine 2340.

Helen Petousis-Harris, Nicola Turner and Ngaire Kerse "New Zealand mothers' knowledge of and attitudes towards immunisation" (2002) 29 NZFP 240.

Cassandra Pingali, Paul L Delamater, Alison M Buttenhein, Daniel A Salmon, Nicola P Klein and Saad B Omer "Associations of Statewide Legislative and Administrative Interventions with Vaccination Status Among Kindergartners in California" (2019) 322 JAMA 49.

Roland Pierik "On religious and secular exemptions: A case study of childhood vaccination waivers" (2017) 17 Ethnicities 220.

Roland Pierik "Mandatory Vaccination: An Unqualified Defence" (2018) 35 J Appl Philos 381.

Roland Pierik "Vaccination Policies: Between Best and Basic interests of the child, between Precaution and Proportionality" (2020) Public Health Ethics 1.

Lisa Pilnik "The United Nations Convention on the Rights of the Child and its Implication in Japan and Sweden" (2006) 3 J Intl L & Policy 5:1.

Thaddeus Mason Pope "The Best Interests Standard: Both Guide and Limit to Medical Decision Making on Behalf of Incapacitated Patients" (2011) 22 Clin Ethics 134.

Tobias Reynolds-Tylus "Psychological Reactance and Persuasive Health Communication: A Review of the Literature" (2019) 4 Front Commun.

Giovanni Rezza "Mandatory vaccination for infants and children: the Italian experience" (2019) 113 Pathog Glob He 291.

Patricia J Rock "Eugenics and Euthanasia: A cause for concern for disabled people, particularly disabled women" (1996) 11 Disabil Soc 121.

Hamish Ross "Children's Rights and Theories of Rights" (2013) 21 Int J Child Rights 679.

Isabel Rossen, Mark J Hurlstone, Patrick D Dunlop and Carmen Lawrence "Accepters, fence sitters, or rejecters: Moral profiles of vaccination attitudes" (2019) 224 Soc Sci Med 23.

Jennifer S Rota, Daniel A Salmon, Lance E Rodewald, Robert T Chen, Beth F Hibbs and Eugene J Gangarosa "Processes for Obtaining Nonmedical Exemptions to State Immunization Laws" (2001) 91 Am J Public Health 645.

Kenneth Ruddle and Anthony Davis "Human Rights and neo-liberalism in small-scale fisheries: Conjoined priorities and processes" (2013) 39 Marine Policy 87 at 88-9; at Jan Narveson "Collective Rights" (1991) 4 Can JL & Jur 329.

Lainie Rutkow and Joshua T Lozman "Suffer the Children: A Call for United States Ratification of the United States Convention on the Rights of the Child" (2006) 19 Harv Hum Rts J 161.

Diane S Saint-Victor and Saad B Omer "Vaccine Refusal and the endgame: walking the last mile first" (2013) 368 Phil Trans R Soc B.

Lamiya Samad, Neville Butler, Catherine Peckham and Helen Bedford "Incomplete immunisation uptake in infancy: Maternal reasons" (2006) 24 Vaccine 6823.

Jennifer Schweppe "Best to Agree to Disagree? Parental Discord, Children's Rights and the Question of Immunization" (2008) 37 CLWR 147.

Seema K Shah, Abby R Rosenberg and Douglas S Diekema "Charlie Gard and the Limits of Best Interests" (2017) 171 JAMA Pediatrics 937.

Lara S Shekerdemian, Nabihah R Mahmood, Katie K Wolfe, Becky J Riggs, Catherine E Ross, Christine A McKiernan...Jeffrey P Burns "Characteristics and Outcomes for Children With Coronavirus Disease 2019 (COVID-19) Infection Admitted to US and Canadian Pediatric Intensive Care Units" (2020) JAMA Pediatr.

Rachel C Shelton, Anna C Snavely, Mara De Jesus, Megan D Othus and Jennifer D Allen "HPV Vaccine Decision-Making and Acceptance: Does Religion Play a Role?" (2013) 52 J Relig Heath 1120.

Shixin (Cindy) Shen and Vinita Dubey "Addressing vaccine hesitancy" (2019) 65 Can Fam Physician 175.

Lee Shepherd, Ronan E O'Carroll and Eamonn Ferguson "An international comparison of deceased and living organ donation/transplant rates opt-in and opt-out systems: a panel study" (2014) 12 BMC Medicine.

Kathryn Sikkink, Timothy McCarthy and Mathias Risse "Examining the Coronavirus from the Lens of Human Rights" (2020) Carr Center Covid-19 Discussion Series.

Ross D Silverman "No More Kidding Around: Restructuring Non-Medical Childhood Immunization Exemptions to Ensure Public Health Protection" (2003) 12 Annals Health L 277.

Ross D Silverman and Wendy F Hensel "Squaring State Child Vaccine Policy with Individual Rights Under the Individuals with Disabilities Education Act: Questions Raised in California" (2017) 132 Public Health Rep 593.

Ian P Sinha, Rachel Harwood, Malcolm G Semple, Daniel B Hawcutt, Rebecca Thursfield, Omendra Narayan, Simon E Kenny, Russel Viner, Simon Langton Hewer and Kevin W Southern "COVID-19 infection in children" (2020) 8 The Lancet 446.

Tania Slater, Anna Matheson, Cheryl Davies, Huia Tavite, Triny Ruhe, Maureen Holdaway and Lis Ellison-Loschmann "'It's whanaungatanga and all that kind of stuff': Māori cancer patient's experiences of health services" (2013) 5 J Prim Health Care 308.

Tara C Smith "Vaccine Rejection and Hesitancy: A Review and Call to Action" (2017) 4 OFID.

Charles B Smith, Margaret P Battin, Jay A Jacobson, Leslie P Francis, Jeffrey R Botkin, Emily P Asplund, Gretchen J Domek and Beverly Hawkins "Are there Characteristics of Infectious Diseases that Raise Special Ethical Issues" (2004) 4 Dev World Bioeth 1.

David M Smolin "Overcoming Religious Objections to the Convention on the Rights of the Child" (2006) 20 Emory Intl L Rev 81.

Tom Sorell "Parental Choice and Expert Knowledge in the Debate about MMR and Autism" in Angus Dawson and Marcel Verweij (eds) *Ethics, Prevention, and Public Health* (Oxford University Press, New York, 2007) 93.

Ginny Sprang and Miriam Silman "Posttraumatic Stress Disorders in Parents and youth After Health-Related Disasters" (2013) 7 Disaster Med Public Health Prep 105.

Christina Steindl, Eva Jonas, Sandra Sittenthaler, Eva Traut-Attasch and Jeff Greenberg "Understanding Psychological Reactance: New Developments and Findings" (2015) 223 Z Psychol 205.

Laurence Steinberg "Adolescent Development and Juvenile Justice" (2009) 5 Annu Rev Clin Psychol 47.

Christine M Szablewski, Karen T Chang, Marie M Brown, Victoria T Chu, Anna R Yousaf, Ndubuisi Anyalechi...Rebekah J Stewart "SARS-CoV-2 Transmission and Infection Among Attendees of an Overnight Camp – Georgia, June 2020" (2020) MMWR 1023.

Luke E Taylor, Amy L Swerdfeger and Guy D Eslick "Vaccines are not associated with autism: An evidence-based meta-analysis of case-control and cohort studies" (2014) 32 Vaccine 3623.

James C Thomas, Michael Sage, Jack Dillenberg and V James Guillory "A Code of Ethics for Public Health" (2002) 92 Am J Public Health 1057.

Lucy Thomson "Whose Right to Choose – A Competent Child's Right to Consent to and Refuse Medical Treatment in New Zealand" (2001) 8 Canterbury L Rev 145.

Sarah Tickner, Patrick J Leman and Alison Woodcock "Factors underlying suboptimal childhood immunization" (2006) 24 Vaccine 7030.

Sarah JJ Touyz and Louis ZG Touyz "The kiss of death: HPV rejected by religion" (2013) 20 Curr Oncol 52.

Mallory J Trent, Elissa J Zhang, Abrar Ahmad Chughtai and C Raina MacIntyre “Parental opinions towards the “No Jab, No Pay” policy in Australia” (2019) 37 Vaccine 5250.

Filippo Trentini, Piero Poletti, Alessia Melegaro and Stefano Merler “The introduction of “No jab, No school” policy and the refinement of measles immunisation strategies in high-income countries” (2019) 17 BMC Medicine.

Kristin Lunz Trujillo, Matthew Motta, Timothy Callaghan and Steven Sylvester “Correcting Misperceptions about the MMR Vaccine: Using Psychological Risk Factors to Inform Targeted Communication Strategies” (2020) Political Res Q 1.

Emma Uprichard “Children and ‘Being and Becomings’: Children, Childhood and Temporality” (2008) 22 Child Soc 303.

Ross Upshur “Principles for the Justification of Public Health Interventions” (2002) 93 Can J Public Health 101.

Mariette van de Hoven “Why One Should Do One’s Bit: Thinking about Free Riding in the Context of Public Health Ethics” (2012) 5 Pub Health Ethics 154.

Sander van der Linden “Why doctors should convey the medical consensus on vaccine safety” (2016) 21 Evid Based Med 119.

Sander L van der Linden, Chris E Clarke and Edward W Maibach “Highlighting consensus among medical scientists increases public support for vaccines: evidence from a randomized experiment” (2015) 15 BCM Public Health.

Marina Voinson, Sylvain Billiard and Alexandara Alvergne “Beyond Rational Decision-Making: Modelling the Influences of Cognitive Biases on the Dynamics of Vaccination Coverage” (2015) PLOS ONE.

Malcom Voyce “Māori Healers in New Zealand: The Tohunga Suppression Act 1907” (1989) 60 Oceania 99.

Paul B Watson, Judy Yarwood and Kim Chenery “Meningococcal B: tell me everything you know and everything you don’t know. New Zealanders’ decision-making regarding an immunisation programme” (2007) 120 NZMJ.

Barbara Faye Waxman “Hatred: The Unacknowledged Dimension in Violence Against Disabled People” (1991) 9 Sex Disabil 185.

Robin A Weiss and Jose Esparza “The prevention and eradication of smallpox: a commentary on Sloane (1755) ‘An account of inoculation’” (2015) 370 Philos Trans R Soc B.

Laura Williamson and Hannah Glaab “Addressing vaccine hesitancy requires an ethically consistent health strategy” (2018) 19 BMC Medical Ethics.

Eric Wombwell, Mary T Fangman, Alannah K Yoder and David L Spero “Religious Barriers to Measles Vaccination” (2015) 40 J Community Health 597.

Abigail L Wroe, Nikki Turner and R Glynn Owens “Evaluation of a Decision-Making Aid for Parents Regarding Childhood Immunizations” (2005) 24 Health Psychol 539.

Paquita de Zulueta “Choosing for and with children: consent, assent and working with children in the primary care setting” (2010) 3 Lon J Prim Care 12.

F International Materials

Committee on the Rights of the Child *General Comment No. 7 (2005): Implementing child rights in early childhood* CRC/C/GC/7 (1 November 2005).

Committee on the Rights of the Child *General Comment No. 13 (2013): The right of the child to freedom from all forms of violence* CRC/C/GC/13 (18 April 2011).

Committee on the Rights of the Child *General Comment No. 14 (2013) on the rights of the child to have his or her best interests taken as a primary consideration (art. 3, para 1)* CRC/C/GC/14 (29 May 2013).

Committee on the Rights of the Child *General Comment No. 15 (2013) on the right of the child to the enjoyment of the highest attainable standard of health (art. 24)* CRC/C/GC/15 (17 April 2013).

Committee on the Rights of the Child *General Comment No. 20 (2016) on the implementation of the rights of the child during adolescence* CRC/C/GC/20 (6 December 2016).

Committee on the Rights of the Child *Concluding observations on the fifth periodic report of New Zealand* CRC/C/NZL/CO/5 (21 October 2016).

International Covenant on Civil and Political Rights 999 UNTS 171 (opened for signature 19 December 1966, entered into force 23 March 1976).

International Covenant on Economic, Social, and Cultural Rights 993 UNTS 3 (opened for signature 16 December 1966, entered into force 3 January 1976).

United Nations International Children's Emergency Fund *For Every Child, Every Right: The Convention on the Rights of the Child at a crossroads* (UNICEF, New York, 2019).

United Nations Office of the High Commissioner for Human Rights *Fact Sheet No. 31, The Right to Health* (United Nations, Geneva, 2008).

G Reports

Priscilla Alderson and Jonathan Montgomery *Health Care Choices: making decisions with children* (Institute of Public Policy Research, London, 1996).

Susan Bidwell "Improving access to primary health care for children and youth: a review of the literature for the Canterbury Clinical network Child and Youth Workstream" (Canterbury District Health Board, Christchurch, 2013).

Commissioner for Children Tasmania *Involving children in decision making – Your quick, practical guide* (Commissioner for Children, Tasmania, 2016).

Tim Corbett "Recommendations to enhance General Practice to improve access of tamariki to immunisation" (ThinkSpace, New Zealand, 2013).

Melissa Eddy “Germany Mandates Measles Vaccine” *New York Times* (online edition, United States, 14 November 2019).

ESR *Notifiable Diseases tables by age, sex, ethnic group, 2019* (ESR, New Zealand, 2019).

ESR *Measles weekly report – Week 8 15-21 February 2020* (ESR, New Zealand, 2020).

Growing up in New Zealand *Growing Up in New Zealand Policy Brief 6: Who is saying what about immunisation: evidence from Growing Up in New Zealand* (Growing Up in New Zealand, Auckland, 2015).

Medical Council of New Zealand *Information, choice of treatment and informed consent* (Medical Council of New Zealand, Wellington 2019).

Ministry of Health *Protecting Children with Cancer from Measles* (Ministry of Health, Wellington, 2012).

Ministry of Health *Immunisation Handbook 2017* (2nd ed, Ministry of Health, Wellington, 2018).

Ministry of Health *COVID-19 in children* (Ministry of Health, New Zealand, 2020).

Ministry of Health *Immunisation Guidelines: for Early Childhood Services and Primary Schools* (Ministry of Health, New Zealand, 2020).

Office of the Children's Commissioner *Supplementary information regarding the impact of COVID-19 on children's rights in Aotearoa New Zealand, for the United Nations Committee on the Rights of the Child – Submission to the UNCRC on COVID-19* (Office of the Children's Commissioner, New Zealand, 2020).

Jackie K Olive and Kirstin RW Matthews *How Too Much Freedom of Choice Endangers Public Health: The Effect of Nonmedical Exemptions from School-Entry Vaccinations in Texas* (Rice University's Baker Institute, Texas, 2016).

Lynne Russell, Kirsten Smiler and Hilary Stace ‘Improving Māori Health and Reducing Inequalities Between Māori and Non-Māori: Has the Primary Health Care Strategy Worked

For Māori? An Evaluation of the Period 2003-2010” (Health Services Research Centre, Wellington, 2013).

Te Puni Kōkiri *He Tirohanga o Kawa kit e Tiriti o Waitangi – A Guide to the Principles of the Treaty of Waitangi as expressed by the Courts and the Waitangi Tribunal* (Te Puni Kōkiri, Wellington, 2001).

Léone Walker, Emma Ward and Daniel Gambitsis *Improving New Zealand's childhood immunisation rates – Evidence Review* (Allen and Clarke, New Zealand, 2020).

Waitangi Tribunal *Report of the Waitangi Tribunal on Claims Concerning the Allocation of Radio Frequencies* (Wai 150, 1990).

Waitangi Tribunal *The Napier Hospital and Health Services Report* (Wai 692, 2002).

Waitangi Tribunal *Hauora Report on Stage One of the Health Services and Outcomes Kaupapa Inquiry* (Wai 2575, 2019).

World Health Organization and United Nations International Children's Emergency Fund *Measles Outbreak in the Pacific-Situation Report No.11* (WHO and UNICEF, 2020).

H Dissertations

Luke Morrison “Legal Responses to Non-Life-Threatening Medical Neglect” (LLB(Hons) Dissertation, University of Otago, 2011).

I Newspaper Articles

Katie Dangerfield “Canada subjected Indigenous people to ‘cruel’ medical experiments, lawsuit claims” *Global News* (online ed, 11 May 2018).

Moirá Donegan “ICE hysterectomy allegations in line with US's long and racist history of eugenics” *The Guardian* (online ed, 17 September 2020).

Melanie Earley “Coronavirus: More than a thousand turn out for anti-lockdown rally in Auckland” *Stuff* (online ed, New Zealand, 12 September 2020).

John Gerritsen “Covid19 coronavirus: Auckland students ‘disadvantaged by lockdown’, schools planning catch-up classes” *New Zealand Herald* (online ed, New Zealand, 26 August 2020).

Tawnell D Hobbs “Schools Are Reopening, Then Quickly Closing Due to Coronavirus Outbreaks” *The Wall Street Journal* (online ed, United States, 17 August 2020).

Te Aniwa Hurihanganui “Otago university medical students fight proposal to limit Māori entry pathway” *RNZ* (online ed, New Zealand, 24 August 2020).

One News “Calls for all NCE students to get automatic pass after Covid-19 disruptions” *One News* (online ed, New Zealand, 27 August 2020).

RNZ “Geneticist James Hadfield: Mapping and tracking Covid-19 in NZ” *RNZ* (online ed, 29 August 2020).

Rowan Quinn “Measles vaccine catch-up ‘too late’, doctor says” *RNZ* (online ed, New Zealand, 31 July 2020).

Rowan Quinn “Patients miss out on surgery under COVID-19 lockdown” *RNZ* (20 April 2020); and Andre Chumko “Coronavirus: Urgent surgeries, scans cancelled as COVID-19 empties hospitals” *Stuff* (5 April 2020).

Khylee Quince “Coronavirus: Covid inequities are showing up in school leaver figures” *Stuff* (online ed, New Zealand, 22 August 2020).

Laura Smith-Spark “Adults may not be the only Covid ‘long haulers.’ Some kids still have symptoms, months after falling ill” *CNN* (online ed, United States, 10 August 2020).

Sun Live “Measles outbreak “not yet at its peak”” *Sun Live* (online ed, 3 September 2019).

Margalit Toledano “Dealing with vaccine hesitancy in times of coronavirus” *Stuff* (online ed, New Zealand, 3 May 2020).

Amelia Wade “Advance NZ ordered to remove Facebook video claiming Labour will force vaccination on citizens” *New Zealand Herald* (28 August 2020).

Ed Yong “The U.K.’s Coronavirus ‘Herd Immunity’ Debacle The Atlantic (online ed, 16 March 2020).

J Internet Resources

Centers for Disease Control and Prevention “Health Equity Considerations & Racial & Ethnic Minority Groups” (24 July, 2020) CDC <cdc.gov>.

Centers for Disease Control and Prevention “Coronavirus Disease – Care for Children” (14 August 2020) CDC <cdc.gov>.

Eamon N Dreisbach “Vaccine hesitancy could make it difficult to achieve herd immunity for COVID-19” (14 July 2020) Healio News <healio.com>.

Kristina Duda “What is the Difference Between Immunization and Vaccination” (updated on December 3, 2019) Very Well Health <verywellhealth.com>.

Health Direct “Immunisation or vaccination – what’s the difference?” (April 2019) <healthdirect.gov.au>.

European Centre for Disease Prevention and Control “Factsheet about measles” ECDC <ecdc.europa.eu>.

Julie Anne Genter “Strengthening New Zealand’s Immunisation System” (10 February 2020) Beehive <beehive.gov.nz>.

Owen Matthews “Britain Drops Its Go-It-Alone Approach to Coronavirus” (March 17 2020) Foreign Policy <foreignpolicy.com>.

Medecins Sans Frontieres “DRC Ebola outbreaks – Crisis update – September 2020” (4 September 2020) MSF <msf.org>.

Sarah Mehta “There’s Only One Country That Hasn’t Ratified the Convention on Children’s Rights: US” (20 November 2015) ACLU <aclu/org>.

Ministry of Health “National and DHB immunisation data” (16 July 2020) Ministry of Health <health.govt.nz>. Ministry of Health “International Health Regulations 2005” (10 December 2007) Ministry of Health <health.govt.nz>.

Ministry of Health “National Immunisation Register” (12 August 2015) Ministry of Health <health.govt.nz>.

Ministry of Health “Measles and rubella officially eliminated in New Zealand – Media release” (6 October 2017) <health.govt.nz>.

Ministry of Health “Socioeconomic indicators” (2 August 2018) Ministry of Health <health.govt.nz>.

Ministry of Health “Health targets: Increased immunisation” (10 August 2018) Ministry of Health <health.govt.nz>.

Ministry of Health “COVID-19: Current cases” (updated 27 September 2020) <health.govt.nz>.

National Conference of State Legislatures “States With Religious and Philosophical Exemptions from School Immunization Requirements” (26 June 2020) NCSL <ncsl.org>.

Newsroom “Lack of Lockdown Increased COVID19 Deaths in Sweden” (3 July 2020) University of Virginia Health System <newsroom.uvahealth.com>.

RACP “Open Letter To The University of Otago: Medical School Proposal To Introduce Equity Pathway Caps” (11 September 2020) Scoop <scoop.co.nz>.

Vanessa Saliba “Measles has been eliminated in the UK – so why do we still see cases and outbreaks?” (22 January 2018) Public Health England <publichealthmatters.blog.gov.uk>.

Scoop “Government Response to measles epidemic a national joke” (3 September 2019) Scoop <scoop.co.nz>.

Statistics New Zealand “Child poverty statistics: Year ended June 2019” (25 February 2020) Statistics New Zealand <stats.govt.nz>.

United Nations International Children's Emergency Fund "Implementing and monitoring the Convention on the Rights of the Child: Turning child rights principles into action and results for children" UNICEF <unicef.org>.

United Nations International Children's Emergency Fund "What is the Convention on the Rights of the Child?" UNICEF <unicef.org>.

World Health Organization "10th Ebola outbreak in the Democratic Republic of the Congo declared over; vigilance against flare-ups and support for survivors must continue" (25 June 2020) <who.int/news-room>.

World Health Organization "WHO Coronavirus Disease (COVID-19) Dashboard" (updated 26 September 2020) WHO <covid19.who.int>.

Word count

The text of this paper (excluding abstract, table of contents, footnotes, and bibliography) comprises approximately 14,938 words.