THE NEW ZEALAND MEDICAL JOURNAL
Journal of the New Zealand Medical Association

Every child to thrive, belong and achieve? Time to reflect and act in New Zealand

Amanda J D'Souza, Nikki Turner, Don Simmers, Elizabeth Craig, Tony Dowell

Abstract

New Zealand continues to grapple with poor and inequitable child health and wellbeing outcomes. The associated high economic costs, the long-term impact on adult health and New Zealand's international children's rights obligations provide further grounds for action. Although there have been many different reports offering solutions and some key areas of progress, gains have been limited and there has not been sufficient clarity and agreement on wider actions. The environment is complex and solutions cross agency and disciplinary boundaries.

This paper reviews the current situation and proposes a set of actions to improve child health and equity. These include a group of recommendations on high-level leadership and coordination, actions to address social conditions, and a range of specific health and wellbeing actions. Progress will require the will, commitment and courage of many to acknowledge the issues and find a way forward.

Preventing suffering and ensuring the wellbeing of our youngest citizens during their formative years is an ethical issue for our nation, an issue of what we value as a society, and the best investment for a highly productive, innovative and resilient nation for the future.

New Zealand (NZ) is a world-leader in child health and development research[1] and ratified the United Nations Convention on the Rights of the Child (UNCROC[2]) nearly 20 years ago. Despite these achievements, our child outcomes are extraordinarily poor with large equity gaps.

NZ was ranked second to last in health and safety of 30 countries in an OECD report on child wellbeing and did not score highly in any category.[3] Public investment in children is low by OECD standards throughout childhood, and is less than half the OECD average for our youngest children.[3]

Knowledge of this state of affairs is not new.[4] Reports over the last decade have expressed concern and called for improvement. We recognise that there have been some advances such as in immunisation, and recent investments in rheumatic fever, Whānau Ora, and Gateway Assessments.

Recent developments include the Government's *Green Paper on Vulnerable Children* with its laudable vision of "Every Child Thrives, Belongs, Achieves" and the Māori Affairs Select Committee *Inquiry into the Determinants of Wellbeing for Māori Children*.[5,6] It appears that the desire to do better is growing and currently there may be significant opportunities for positive change.

This article is endorsed by the New Zealand Medical Association

The health of New Zealand children

While major causes of mortality, such as injury and sudden unexpected death in infancy (SUDI) have been declining, the rate of decline has been less than in other nations and inequalities have persisted or even widened.[7]

Socioeconomic conditions have had a major impact on child health. Hospitalisations for socioeconomically sensitive conditions such as infectious and respiratory diseases steadily increased for children during the 1990s and early 2000s, with the significant rises occurring for those from lower socioeconomic backgrounds, particularly for Māori and Pacific peoples.[8,9] During this period, NZ experienced major socioeconomic changes, the second largest increase in income inequality in the OECD, and a marked rise in child poverty.[10–12]

These hospitalisations peaked in 2002, gradually declined, and increased during 2007–2010, resulting in around 4800 extra admissions in 2010 compared to 2007.[13]

Disparities are seen across a range of child health indicators and can be observed very early on in life. For example, Māori infants are nearly five times more likely to die from SUDI than European infants.[13]

Māori and Pacific children bear the greatest burden of ill-health and there is a social gradient evident for most conditions (i.e. with rates progressively increasing with increasing socioeconomic deprivation). Such disparities are well illustrated with NZ's 14-fold higher rate of rheumatic fever compared to the OECD average, the burden of which predominantly falls on Māori and Pacific children and children living in more deprived areas.[8]

Similarly, hospitalisation rates for injuries arising from maltreatment demonstrate a marked social gradient, with rates rising from 4.2 per 100,000 for children living in the least deprived areas to 42.2 per 100,000 for those from the most deprived areas.[13] This gradient across the population shows that such outcomes are not confined to those living in the most deprived areas, but affect children throughout society.

While trends for many conditions have been disappointing, some gains have been made. Immunisation rates, for example, have steadily improved so that by the end of 2011 more than 90% of 2 year olds are fully immunised and disparities have markedly reduced.[14] This has been due to leadership, the effective use of target setting, infrastructure such as the national immunisation register, effective service delivery and use of specific evidence-based strategies.[14]

The environment, early relationships, and children's health

The social and physical environment has a powerful effect on children's health with complex and interactive pathways being involved. For example a respiratory illness can be the result of the transmission of the pathogen (encouraged by overcrowding), host factors (such as being more vulnerable from poor nutrition or chronic stress) the physical environment (damp housing, exposure to tobacco smoke) and the social environment (access to health care services, parental education, social support).[15]

While genetic variation accounts for some diseases, of far more importance are diseases that occur as a result of the way in which the genome interacts with its environment. From the moment of conception factors such as maternal nutrition, the

presence of stress, and the effects of various molecules including toxins such as alcohol, influence chromosomal activity in the developing fetus.[1,16]

Crucial maturation processes continue during early childhood, and these are critically shaped by the milieu of each child. This period of rapid brain and organ development can be profoundly influenced by a lack of nurturing and secure relationships and the presence of "toxic" stress such as violence.[16–18] These exposures can divert brain development away from learning and skill development to a persistently activated physiological stress response, the long-term impact of which depends on intensity, duration and the presence of protective factors such as supportive relationships.[17]

These negative early life circumstances can have life-long consequences resulting in poorer social and cognitive skills and poor mental resilience in later life. Many chronic diseases of adulthood, such as cardiovascular disease and mental illness, as well as longevity itself, are linked to early life circumstances.[1,18]

The impact of poverty on child health and wellbeing also involves complex pathways. One important example may be the impact of economising behaviours or "enforced lacks" such as children having to share a bed or several to a bedroom, cutting back on fresh fruit and vegetables, having difficulties heating the house in winter, being exposed to damp or mouldy housing and postponing doctor's visits because of cost.

These economising behaviours are a common experience for many children in NZ. The 2008 Living Standards Survey found that over half (51%) of Pacific children aged 0–17 years, 39% of Māori children, 15% of European children, and 59% of children whose main source of family income was a Government benefit scored four or more on a composite deprivation index of "enforced lacks".[13]

Hence efforts to improve child health and equity must consider the impact of social conditions, the wellbeing of parents, and the social and economic policies which shape these.[19]

The imperatives for action

There is a compelling case for a special focus on children. Firstly, there is an ethical and rights-based argument. The United Nations Committee on the Rights of the Child (UNCROC) acknowledges the special position of children in society; that the best interests of children must be a primary concern in decision-making, and that the family should be afforded protection and assistance so that it can fully assume its care-giving responsibilities.[2]

Successive Governments have committed to progressively realising this international treaty in our legislation, policy and practice.[20] However, children do not vote and there are currently no formal mechanisms in place to ensure that their rights and interests are considered in public policy decision-making processes.[4,12]

Last year the UNCROC provided further recommendations to the NZ Government, including the need for a coordinating mechanism, an action plan, urgent action to address disparities for Māori children, greater resource allocation for children, greater consideration of the views of children, and reduced discrimination, maltreatment and violence.[21]

Secondly, there is an outcomes-based argument. Reducing morbidity and mortality in children is important in itself. However, early childhood is also a crucial time for

adult development and for attaining more equitable health and social outcomes throughout the lifecourse.[22,23]

A healthy start to life produces individuals who are more likely to participate effectively in society and who are less likely to contribute to the growing burden of long term conditions such as mental illness, type 2 diabetes and cardiovascular disease.[17]

Thirdly, there is an economic argument. Two recent NZ reports estimate the economic cost of a poor start to life as being in the order of 3 to 4.5% of GDP per year (at least $6 billion), due to increased expenditure on health, welfare, education, and criminal justice and lower productivity.[24,25]

Finally, there is a societal argument around what sort of community NZ wishes to be and what we value as a nation. Media reports of child abuse receive brief intense moments of attention and there is rhetoric around the desire to be a more cohesive, caring and less inequitable society. These reports are often followed, however, by uncertainty about how to move from the unacceptable present.

Challenges and opportunities

Given the compelling case for action, how can further progress be gained? There is no shortage of excellent reports, analyses, recommendations and strategic documents.[3,4,7,19,21,26–32]

There have been some important gains, such as the repeal of Section 59 of the Crimes Act to provide better protection of children from assault. If focused on children, there is much to be gained from the growing use of quality improvement approaches within the health sector.

There is promise from recent investments in Whānau Ora, Integrated Family Health Centres, Gateway Assessments, and a disease focus such as for rheumatic fever. However, overall, action remains fragmented, insufficient and lacking a coordinated national framework across health and other sectors.[4]

We acknowledge that the current fiscal environment presents challenges and will do so for some time. However, as NZ's poor performance in child health and wellbeing predated the global financial crisis and recession, the barriers to action are more complex than a difficult economic climate alone. Furthermore, our current approach is costly and unsustainable.[24,25]

Solutions are complex and cross agency and disciplinary boundaries. One of the fundamental difficulties is that there are strongly-held disparate views on the causes of the problem, and hence, the solutions. The issues can become polarised and entrenched in rhetoric and emotion.

There is a perceived tension between differing beliefs of who ought to be responsible —creating a false dichotomy between the roles of parental authority and the State. Parents and caregivers have the primary responsibility for child-rearing, however not in isolation; the broader environment within which the family is living also affects their child-rearing capacity and child outcomes.

The Government and civil society can do much to support the role of parents and to ensure good outcomes for our children.[2,17] Furthermore, there is the need to

acknowledge children as citizens, competent in their own right and able to exercise agency, while still needing to be nurtured and protected.[2,33]

A further challenge relates to balancing the needs of the growing child with the advantages from having a parent in paid work. There may be a tension between paid work and the important role of child-rearing, particularly if employment is poorly paid, is not family-friendly, or if quality child care is not affordable or available.

NZ has a high proportion of children living in one-parent families (28% of families), where the likelihood of poverty and deprivation is much higher.[34] The majority of one-parent families are headed by mothers (23.5% of families) compared to 4.7% headed by fathers.[34]

While paid employment may be potentially the best way out of hardship, particularly over the longer term, in NZ about 40% of children in poverty are from families with at least one full-time worker.[35]

There appears to be a general recognition in NZ of the need for a basic level of provision by the State for children. However the optimal level and adjustment of this has varied since the 1980s, with more recently, a discriminatory lower level of State provision for children of beneficiaries than for other children,[36] unlike the universal basis of superannuation with an inflation-adjusted set baseline.

The economic challenge of sustaining this level of superannuation is not reason to avoid the dialogue on what should be a basic level of provision for children.

Finding a way forward

While there are many areas of uncertainty, some issues are clear. NZ's child health and wellbeing statistics are not acceptable. There is recognition of the need for all children to receive the necessary provisions for healthy growth and development. However how to achieve this has not been agreed. Our current approach of piecemeal, ad hoc action is not sufficient.

There is not one simple solution for NZ or indeed for other comparable countries and there will remain areas of significant debate about how to act. It is clear that multiple actions are needed in many areas and that we need to prioritise and invest more in children, starting early and prioritising children from disadvantaged backgrounds.

There are a range of international and national frameworks to guide action, a wealth of dedicated community and professional organisations and individuals and a skilled workforce to help plan, commence and sustain action and to monitor progress.

As a society, when we choose to focus we can produce results, such as our success with immunisation. Despite the fiscally constrained environment, NZ has the means to substantially improve child health and wellbeing. It will require reprioritisation and the will, commitment and courage of all our community to acknowledge the issues and negotiate a way forward. This will require a common understanding of the above imperatives for action.

How to act

NZ already has many components in place. Some actions may take time to negotiate and implement; some changes can be made relatively quickly. There will be some

areas in which the course of action is clear, where there is strong evidence of effectiveness or where action is clearly based on what is valued as a nation. However, many areas will not have such clear linear solutions and further dialogue will be required.

There are common themes for action, many well expressed in the recent New Zealand Medical Association equity statement[37] and highlighted from many previous reports.[3,4,7,19,21,30] These broadly include starting with strong nationwide leadership with a voice for children at the highest level of Cabinet.

All policies and strategies need child and equity impact assessments. Healthy children's policy requires an equitable fiscal and social policy which includes measures for, and monitoring of, progress on child hardship. Greater co-ordination and integration is required across all policy and service delivery domains. Enhanced effort and integrated approaches are required particularly in the early childhood years and they must be given adequate investment and time to develop and be reviewed.

Leaving society's provision for children to philanthropy is ad hoc and insecure, and its failure to provide adequately for all children in need led to the establishment of State welfare programmes last century.[38]

Based on the available evidence an approach based on a universal platform is required to achieve the gains necessary and to enable identification of need.[22,39] Proportionate universalism refers to a universal approach but with actions scaled in proportion to need or the level of disadvantage.[22]

A universal platform means that all children and their families are identified at birth, preferably antenatally, their needs and strengths being identified early on, and then appropriate resources or services being made available and accessible, with follow up occurring in a timely manner.[16,29,31,32,40]

Recommendations

The following 10 recommendations to Government are based on the key themes emerging from a range of local and overseas reviews, which have considered the best ways of achieving optimal child health and wellbeing. While they are ranked by number, an effective and long-lasting solution requires a comprehensive approach, and not cherry-picking of individual recommendations. We recognise that action will require stepped implementation and will require the combined efforts of many, not Government alone.

A comprehensive policy framework for children:

1. **Enshrine a whole-of-Government and public sector commitment to children.** Through, for example, a Children's Act, a senior Minister for Children within Cabinet, greater investment, child impact assessments, use of the UNICEF Child Friendly Cities Framework by local authorities, and consideration of a core public sector office or Ministry for Children.
2. **Develop a comprehensive National Children's Action Plan.** Underpinning principles should include UNCROC, te Tiriti o Waitangi, and proportionate universalism. The plan should be cross-sectoral and include a focus on prevention and equity.

3. **Establish fair and comprehensive fiscal and social policies for children.** This includes a minimum level of support and services for all children and their parents so that they can 'thrive, belong and achieve.'
4. **Establish indicators for child health and wellbeing.** Where possible, develop these as targets for service delivery (in addition to immunisation rates).

Specific health and wellbeing actions:

5. **Build on existing quality improvement and integrating frameworks for children's services.** Many activities have already been initiated in other areas of healthcare delivery but there now needs to be a focus on integrating the early life service platforms of maternity, primary care, Well Child/Tamariki Ora services and early childhood education.
6. **Resource effective community-led development initiatives to improve child wellbeing and reduce inequities.** Ensure that these are evaluated.
7. **Introduce evidence-based measures to protect children from harmful exposures.** Starting with maltreatment and violence, the second-hand effects of alcohol misuse and tobacco, and the excessive promotion of unhealthy food.
8. **Implement or broaden specific evidence-based measures in important child health areas.** Particularly for child nutrition, infant and child mental health, reducing respiratory and infectious diseases, injury prevention, oral health and SUDI prevention.
9. **Continue and broaden the programmes which improve home heating and insulation.** Both for state and private rental housing.
10. **Ensure that the momentum towards all children having free access to primary care services continues and that the additional services that they and their parents need are available at no cost and in a timely fashion.** Special effort may be needed to reach Maori and Pacific children, children in the care and protection system, children with disability or chronic conditions, and children from refugee backgrounds. There needs to be a greater focus on child development services, mental health services (infant, child and for parents), special education services, parenting training and support, and other community-based interventional services. The concept of Integrated Family Health Centres may provide an ideal platform for delivering these services.

Conclusion

NZ has poor and inequitable child health and wellbeing outcomes. Child wellbeing in NZ is one of the most important issues facing the nation. Now is the time to seize opportunities and develop new strategies to improve our child health and wellbeing statistics.

Preventing suffering and ensuring the wellbeing of our youngest citizens during their formative years is an ethical issue for our nation, an issue of what we value as a society, and the best investment for a highly productive, innovative and resilient nation for the future.

This article is endorsed by the New Zealand Medical Association

Competing interests: None declared.

Author information: Amanda D'Souza, Senior Lecturer, Department of Paediatrics, University of Otago, Wellington; Nikki Turner, Senior Lecturer, Department of General Practice and Primary Care, University of Auckland; Don Simmers, NZMA Board Member and Chair of Health Equity Sub-committee, and GP, Newtown Medical Centre, Wellington; Elizabeth Craig, Director, NZ Child and Youth Epidemiology Service, Department of Women's and Children's Health, University of Otago, Dunedin; Tony Dowell, Professor, Department of Primary Care and General Practice, University of Otago, Wellington

Acknowledgements: We are grateful to Professor Innes Asher and Dr Russell Wills for their comments on earlier drafts of this article.

Correspondence: Dr Amanda D'Souza, Senior Lecturer, Department of Paediatrics, University of Otago, PO Box 7343, Wellington South 6242, New Zealand. Fax: +64 (0)4 3855898; email amanda.dsouza@otago.ac.nz

References:

1. Gluckman P, Hayne H. Improving the Transition: Reducing social and psychological morbidity during adolescence. A report from the Prime Minister's chief scientific advisor 2011, Office of the Prime Minister's Chief Science Advisor, Auckland, 2011.
2. UNICEF. Convention on the Rights of the Child. 1989.
3. OECD. Doing Better for Children. Paris: Organisation for Economic Co-operation and Development; 2009.
4. Public Health Advisory Committee, The Best Start in Life: Achieving effective action on child health and wellbeing. Wellington: Ministry of Health; 2010.
5. NZ Government. Every child thrives, belongs, achieves. The Green Paper for Vulnerable Children. Wellington: NZ Government; 2011. http://www.msd.govt.nz
6. Maori Affairs Select Committee, Inquiry into the determinants of wellbeing for Maori children, in Maori Affairs Select Committee, Wellington. 2011.
7. Child and Youth Mortality Review Committee, Fifth Report to the Minister of Health: Reporting mortality 2002–2008. Wellington: Child and Youth Mortality Review Committee; 2009.
8. Craig E, Jackson C, Han DY, et al. Monitoring the Health of New Zealand Children and Young People: Indicator Handbook. Auckland: Paediatric Society of New Zealand and New Zealand Child and Youth Epidemiology Service; 2007.
9. Baker MG, Telfar Barnard L, Kvalsvig A, et al., Increasing incidence of serious infectious diseases and inequalities in New Zealand: a national epidemiological study. The Lancet 2012. DOI:10.1016/S0140-6736(11)61780-7. http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(11)61780-7/fulltext#article_upsell
10. Blakely T, Tobias M. Inequalities in mortality during and after restructuring of the New Zealand economy: repeated cohort studies. . BMJ. 2008 February 16; 336(7640): 371–375. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2244751/
11. OECD. Divided we stand: why inequality keeps rising. Country note: New Zealand. Paris: Organisation for Economic Co-operation and Development; 2011.
12. Blaiklock A, Kiro C, Belgrave M, et al. When the Invisible Hand Rocks the Cradle: New Zealand Children in a Time of Change. Florence: UNICEF Innocenti Research Centre; 2002.
13. New Zealand Child & Youth Epidemiology Service, The Children's Social Health Monitor 2011 Update. Dunedin: NZ Child & Youth Epidemiology Service: 2011.
14. Turner N. The challenge of improving immunization coverage: the New Zealand example. Expert Review of Vaccines, 2012;11(1): 9-11.

This article is endorsed by the New Zealand Medical Association

15. Falagas ME, Karamanidou C, Kastoris AC, et al. Psychosocial factors and susceptibility to or outcome of acute respiratory tract infections. Int Journal of Tuberculosis and Lung Disease 2010;14(2): 141–148.
16. American Academy of Pediatrics, Early Childhood Adversity, Toxic Stress, and the Role of the Pediatrician: Translating Developmental Science Into Lifelong Health. Policy Statement. Pediatrics, 2012;129(1): e225-231.
17. Center on the Developing Child, A Science-based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children. Boston: Center on the Developing Child, Harvard University: 2007.
18. Shonkoff J, Boyce W, McEwen B. Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities: Building a New Framework for Health Promotion and Disease Prevention. JAMA 2009;301(21):2252-2259.
19. Commission on Social Determinants of Health, Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health. Geneva: World Health Organization; 2008.
20. Human Rights Commission. Chapter 4: The rights of children and young people. Ngā tika o ngā tamariki, rangatahi. In: Human Rights in New Zealand Today. Wellington: Ngā Tika Tangata O Te Motu. Available from: http://www.hrc.co.nz/report/chapters/chapter04/children01.html
21. Committee on the Rights of the Child. Fifty-sixth session concluding observations: New Zealand. Geneva: Committee on the Rights of the Child; 2011.
22. Marmot M. Fair Society Healthy Lives: Strategic review of health inequalities in England post-2010. London: The Marmot Review; 2010.
23. Hertzman C, Siddiqi A, Hertzman A, et al. Tackling inequality: get them while they're young. BMJ 2010;340:346-348.
24. Pearce J. National Costs of Child Poverty in New Zealand. Analytica. Auckland: Analytica; 2011.
25. Infometrics Ltd, 1000 days to get it right for every child The effectiveness of public investment in New Zealand children, In Every Child Counts Discussion Paper Number 2. Wellington: Every Child Counts; 2011.
26. Ministry of Health, Child Health Strategy. Wellington: Ministry of Health; 1998.
27. Ministry of Youth Affairs. Youth Development Strategy Aotearoa. Wellington: Ministry of Youth Affairs; 2002.
28. New Zealand Medical Association. Health equity position statement. N Z Med J 2011;124. http://journal.nzma.org.nz/journal/124-1330/4569/content.pdf
29. Tanski S, Garfunkel LC, Duncan PM, Weitzman M, eds. Performing preventative Services: A Bright Futures Handbook. Editor. American Academy of Pediatrics; 2010. http://brightfutures.aap.org/
30. CPAG. Left Further Behind: How New Zealand is failing its children. Auckland: Child Poverty Action Group; 2011.
31. Love JM, Kisker EE, Ross C, et al. The effectiveness of early head start for 3-year-old children and their parents: Lessons for policy and programs. Developmental Psychology 2005;41(6):885–901.
32. Department of Health, Healthy lives, brighter futures – The strategy for children and young people's health. London: Department of Health; 2009.
33. Smith A, Bjerke B. Children's Citizenship, in Children as citizens? International voices. Taylor N and Smith A, editors, Otago University Press; 2009.
34. Ministry of Social Development, The Social Report 2010. Wellington: Ministry of Social Development; 2010.
35. Perry B. Measuring and monitoring child poverty and hardship. Children, 2011;Summer79:8–16.

36. St John S. Chpt 6: Working for Families, in Left behind: how policies fail the poorest children in NZ, Dale M, O'Brien M, St John S. Editors. Auckland: Child Poverty Action Group; 2011.
37. Blakely T, Simmers D, Sharpe N. Inequities in health and the Marmot Symposia: time for a stocktake. N Z Med J 2011;124(1338). http://journal.nzma.org.nz/journal/124-1338/4754/content.pdf
38. Cunningham HL. Children and Childhood in Western Society Since 1500. Harlow: Pearson Longman; 2007.
39. Rose G. Sick individuals and sick populations. International Journal of Epidemiology, 1985;14:32–38.
40. Baker N. Sudden unexpected infant death—no more "stunned amazement"! N Z Med J 2011;124(1345). http://journal.nzma.org.nz/journal/124-1345/4930/content.pdf