

Child wellbeing integrated in the curriculum

Galina Stebletsova | *New Zealand Tertiary College*

Barbara Scanlan | *New Zealand Tertiary College*

Although Te Whāriki: He Whāriki Mātauranga mō ngā Mokopuna o Aotearoa: Early Childhood Curriculum (Te Whāriki) (Ministry of Education [MoE], 2017), the New Zealand early childhood curriculum, dedicates an entire strand to wellbeing, stating that “All children have the right to have their health and wellbeing promoted and to be protected from harm” (MoE, 2017, p. 26), there is considerable concern to what degree this message is enacted in early childhood education. This article aims to explore how the curriculum can support the health and wellbeing of children and the role educators play in co-constructing a curriculum that accommodates and promotes health and wellbeing knowledge and practices with children and their families and whānau.

Traditional health models recognise holistic wellbeing

Te Whāriki (MoE, 2017) understands that children’s wellbeing has to be viewed from a holistic point of view, where both mental and physical health are considered. A similar view is reflected in the Māori holistic model of wellbeing, Te Whare Tapa Whā, where the four cornerstones of Māori health are whānau (family health), tinana (physical health), hinengaro (mental health) and wairua (spiritual health) (Durie, 1985). The Samoan model of wellbeing, the Fonofale, also suggests to consider health and wellbeing holistically, emphasising that various aspects of wellbeing (family, cultural, spiritual, physical and mental) are interrelated (Pulotu-Endemann, 2001). The idea of holistic wellbeing is not new and has been well explored in a range of research and has been practiced across many cultures (Gendron, Kouremenou, Rusu, 2016). Traditionally, it has been understood that mind, body and spirit are interconnected and affect each other (Howell, Auger, Gomes, Brown, & Leon, 2016).

This triumvirate of mind, body and spirit is evident in for example traditional Chinese medicine, which is rooted in the ancient philosophy of Taoism. It incorporates a balance between opposing forces of yin and yang (Hinrichs & Barnes, 2013). Equally, a strong emphasis is placed on creating a sense of wellbeing through connecting the body and the mind by practicing traditional healing exercises like tai chi or qi gong. As the body is seen as a miniature version of a larger, surrounding universe, looking after one’s body by following a healthy diet and exercise is a must in traditional Chinese medicine. Similar approaches to health also exist in East and South Asia, each with their own distinct take on a holistic view of wellbeing (Cho, 2015).

In Māori culture, Rangimārie Rose Pere’s (1997) model of wellbeing called Te Wheke, based on the eight tentacles of the octopus, sees all aspects of Māori life and health as interconnected, enabling an inclusion of family, spirituality and ancestors. Within the concept of Te Wheke, each tentacle of the octopus represents aspects of a person’s life that need to be supported in order to sustain balance and wholeness. The tentacles include te whānau (the family), waiora (total wellbeing for the individual and family), waiuatanga (spirituality), hinengaro (the mind), taha tinana (physical wellbeing), whanaungatanga (extended family), mauri (life force in people and objects), mana ake (unique identity of individuals and family), hā a koro ma, a kui ma (breath of life from forbearers), whatumanawa (the open and healthy expression of emotion). Equally inclusive is Te Whare Tapa Whā, a health model suggested by Mason Durie in 1982, which uses four walls of a house, with each wall forming an integral support. The four walls are taha tinana (physical health), taha hinengaro (mental health), taha whānau (the extended family health), taha wairua (spiritual health) (Ministry of Health, 2017).

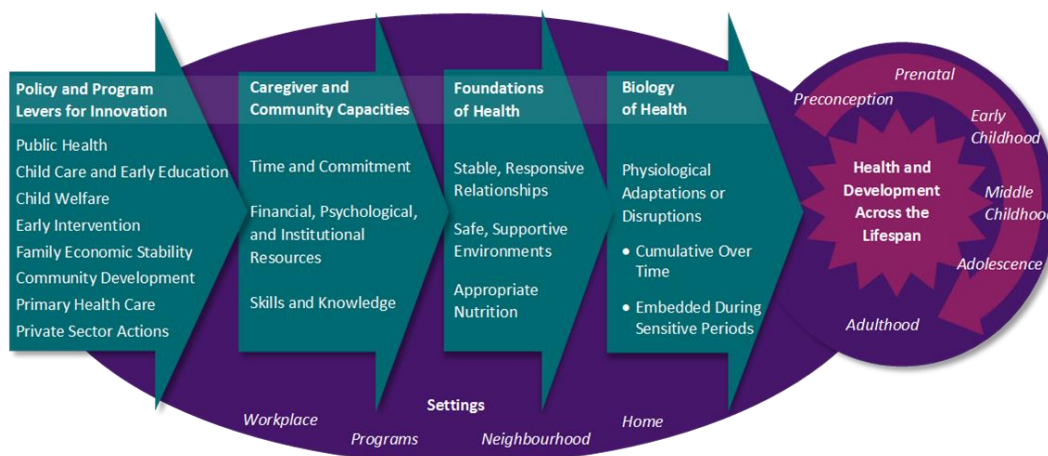
Similarly, the Samoan health model, Fonofale (Puloto-Endemann, 2001), also takes a holistic approach to wellbeing. The fale or house serves as a metaphor, with family forming a solid foundation. The roof of the fale is culture, which covers and protects every other component of the house and is supported by the four pillars of spiritual, physical, mental and other contributors to wellbeing. It's important to note that, like the quality of wellbeing, this fale does not exist in a vacuum. Therefore environment, time and context are also acknowledged as significant contributors in this metaphor.

The western health model that used to be practiced before more compartmentalised practices evolved also focussed on the interconnectedness of mind, body and spirit (Allison, 1999). Early health practitioners, such as Hildegard von Bingen (1098-1179), wrote botanical, theological and medicinal texts and applying her observations and knowledge in the herb garden and the infirmary at the convent where she lived (Bennett, Hollister & Warren, 2001). Herbalism was and is still practiced by many western health practitioners, making use of old as well as new knowledge, regarding the healing powers of herbs and their supplementary use in diets to support mind, body and spirit (Wood, 2004).

Although all this knowledge is reasonably readily available, its application in early childhood education curriculum still heavily depends on the attitude and commitment of individual teachers. This is evident in *Te Whāriki* (MoE, 2017), which expects teachers to “model positive attitudes towards hauora, healthy eating and activity” (p. 30), without giving guidance on how teachers could achieve such a goal. This lack of guidance then implies that teachers need to be fully committed to promote holistic health and wellbeing in early childhood contexts, and be the active advocates for the wellbeing of children who attend early childhood settings (MoE, 2016).

Interdisciplinary approach to child wellbeing

Child wellbeing is a well discussed topic in a variety of domains, including health, welfare and education, and for instance, *Te Whāriki*, the New Zealand early childhood education curriculum, dedicates not only an entire strand to wellbeing but has the notion of physical, mental and spiritual wellbeing woven throughout the framework. The Center on the Developing Child at Harvard University (2010) developed an interdisciplinary model of health promotion, which has also been used by the New Zealand Ministry of Health, discussing pathways to child health (see Kvalsvig, D’Souza, Duncanson & Simpson, 2015). The model encompasses biology of health, foundations of health, caregiver and community capacities, and policy and program levers for innovation. These dimensions combined create a framework for improving physical as well as mental wellbeing. The dimensions are depicted in the model below and will be discussed in more detail later.



Adapted from Center on the Developing Child at Harvard University, 2010, p.3

Although the education sector acknowledges that child development is holistic, there appears to be a gap where education meets health policy. It seems common that whilst the general knowledge of the importance of health and wellbeing is present, the sociocultural focus of current early childhood curriculum dominates, sometimes overshadowing the significance of more in-depth understanding of how to approach children's health and wellbeing in early childhood contexts. This is interesting, seeing that, Berk's (2014) research has established that meeting the developmental needs of children is about building a strong foundation for physical, mental and spiritual health and about enhancing readiness to succeed in school. Therefore health policies should look beyond provision of medical services and rather see them as a way to reduce social burdens, for example relying on welfare or entering the criminal justice system; improve human capital, for example by creating a healthy, capable work force and thus improved economy; and save on medical care costs in the adult years (Center on the Developing Child at Harvard University, 2010).

In order to prevent health issues in adults, the process of learning about how to stay and keep healthy needs to be enhanced in a wide range of policy domains, including early childhood education and messages and practices regarding promotion of wellbeing should be an integral part of curricula. Although this may highly depend on the local context early childhood teachers find themselves in, a health and wellbeing component should be an integrated into the teacher education programs.

Overarching concepts of child health promotion and disease prevention

The health of a child begins with the health of the future mother before she becomes pregnant and lays the groundwork for a lifetime of wellbeing (Berk, 2014). This notion is supported by *Te Whāriki* (MoE, 2017) in its principles of Family and community and Relationships, suggesting that early childhood education encompasses the family and wider community as well. Therefore, information and support for becoming mothers needs to be available and the importance of the prenatal period in terms of laying the foundations for a child's health, needs to be understood.

According to research (Minniss, Wardrope, Johnston, & Kendall, 2013), health promotion and disease prevention is guided by three overarching concepts, which are:

- Experiences (good and bad) that are built into our bodies and brain in the early years can either promote or disrupt the road to a healthy life, both physically and mentally. This highlights the responsibility educators have in terms of including healthy habits in the curriculum, as supported by *Te Whāriki* (MoE, 2017) and also recognised the commitment of registered teachers, to the learners, family and whānau and society, as is outlined in *Our Code, Our Standards* (Education Council, 2017).
- Genetics and its expression during childhood and later, including the prenatal period, may significantly impact on health. Although the exact triggers and mechanisms are constantly being researched and to date, there is no one definite opinion on the ways genetics may express itself in individuals, an important implication here is that being up-to date with recent research and developments in this field allows teachers to enhance their knowledge and broaden their understanding about developmental and learning aspects.
- Research suggests that the experiences are at least as powerful in their impact on the odds of a healthy life (Nagel, 2012). The importance of having positive experiences therefore needs to be recognised by educators, as a curriculum that provides the necessary positive experiences, requires thoughtful planning, active engagement and reflection from teachers.
- The current focus on health promotion and disease prevention for adults *needs to be extended to the early years*, including the prenatal period, to strengthen the foundations of health (Center on the Developing Child at Harvard University, 2010).

With all this knowledge and research available to us, we are compelled to “think and act creatively to enhance the healthy development of young children” (Centre on the Developing Child at Harvard University, 2010, p. 3). The Center on the Developing Child at Harvard University offers a framework of four interrelated dimensions, which can aid our thinking about the physical and mental wellbeing, and related policies and practices. A similar model, tailored to the specific local historical, political and sociocultural context, could be embraced in New Zealand and integrated into *Te Whāriki*, which is founded on a holistic and sociocultural understanding of wellbeing (MoE, 2017).

Four dimensions of health and their possible influence on curriculum

Although this framework has been developed in the context of the USA, there is no doubt that the model as detailed by the Center on the Developing Child at Harvard University (2010) can be adapted to fit other nations, including New Zealand. By reviewing policies and practices in the sectors affecting the early years of childhood and the prenatal period, the odds for lifelong health increase.

Therefore, by improving child health, there is an apparent possibility of improving adult health, which in due course leads to an improvement of a nation’s health, social costs and even the economic wellbeing of a country (Shonkoff & Bales, 2011).

The four dimensions of this framework are:

1. Biology of health
2. Foundations of health
3. Caregiver and community capacities
4. Policy and program levers for innovation

Biology of health

Neuroscience and physical and social environments work together and influence the roots of lifelong wellbeing. If children experience physically or emotionally harmful environments, then this has a lasting effect throughout a person’s life. Therefore, early childhood education settings should be a safe place for children, where they experience an environment that supports their individual interests and requirements and where they can explore and learn to navigate their world. This notion is supported by *Te Whāriki* (MoE, 2017), which does not only recognise children’s right to protection from harm, but also declares that children have “a right to experience affection, warmth and consistent care” (p. 26), which supports children’s ability to make sense “of their worlds by generating and refining working theories” (p. 47). The Graduating Teacher Standards (Education Council, 2015) contribute to this statement by suggesting that teachers need to use professional knowledge to plan for a safe, high quality teaching and learning environment and demonstrate commitment to and strategies for promoting and nurturing the physical and emotional safety for learners.

Some researchers have compared a child’s evolving health in the early years “to the launching of a rocket, as small disruptions that occur shortly after the take-off can have very large effects on its ultimate trajectory” (Center on the Developing Child at Harvard University, 2010, p. 5). Therefore, getting things right from the start can help avoid costly and less successful attempts to fix the problems that may be encountered later on in life.

Interestingly, research reports that common chronic illnesses in adult life, such as hypertension, diabetes, cardiovascular disease, and stroke, are linked to experiences and processes in early childhood (Santrock, 2015; Berk, 2017). Physical, as well as psychological disadvantages in early childhood may lead to adverse outcomes later on in

life. It is important to consider why children suffer from repeated illnesses during childhood and what policies and practises need to be put in place to avoid them (Berk, 2014). With this knowledge in mind, educators can recognise their opportunity to help lay strong foundations for a healthy life for children. Even small changes, such as physically active play supported by engaged, role modelling teachers, can contribute to an effective curriculum that encourages healthy habits from the early years onwards.

It is important to increase teachers' awareness on the fact that, as research has shown (Shonkoff, 2010), children who grow up in low socioeconomic families may be particularly vulnerable to the biological embedding of disease risk, as they may have lesser access to medical care for various reasons, including lack of parental education about when to seek medical attention; lack of finances to pay for this service; poor housing conditions; and the related stress that parents and children may experience in those situations. *Te Whāriki* (MoE, 2017) recognises that "family and community are integral to learning and development, with every child situated within a set of nested contexts but also includes the whole, whānau, community and beyond" (p.60). An important implication here is that early childhood spaces need to serve as supportive, welcoming environments, ready to provide assistance to families and demonstrating open-mindedness and acceptance of the challenging circumstances the family/whānau is currently experiencing.

Foundations of child's health

As a society as well as educators working with young children and early childhood education students, we need to focus on:

- Children's environment and relationships, as is strongly supported by *Te Whāriki* (MoE, 2017)
- The physical, chemical and built environments
- Appropriate nutrition (Heart Foundation, 2017).

The significant influence on children's wellbeing of those three areas is acknowledged in the legislation, which guides early childhood education settings in New Zealand. For further reading on legislation that guides the early childhood education sector, the following documents could be explored: *Licensing Criteria for Early Childhood Education and Care Centres 2008* (MoE, 2016), *Education (Early Childhood Services) Regulations 2008* (MoE, 2017) and *Vulnerable Children's Act 2014* (Oranga Tamariki/Ministry for Children, 2017).

Caregiver and community capacity

The importance of attachment theory, which promotes the emotional and biological regulation of self is well established in a variety of studies, including recent neuroscientific research (Nagel, 2012). Studies have proven that children with secure attachment are more likely to thrive later on in life, do well physically, mentally, have less behaviour issues, more productive employment, less need for social services and reduced likelihood of an involvement with the justice system (Berk, 2014; Nagel, 2012). Furthermore, children who only experience short periods of moderate stress, are developing a stronger immune system as the body can concentrate on building this system rather than dealing with stress (Nagel, 2012). This ability to deal with stress is immediately linked to the quality of maternal care, or other close caregivers, for example, in an early childhood education setting, and the care the mother received herself as a child have a profound influence on a child's development. All of this takes place as the genes that are involved in regulating the body's stress response are highly sensitive to caregiving. This means, that a mother leaves a signature on those genes of her children that are responsible for the development of physiological and behavioural responses to adversity. This signature is also called epigenetic marker and has a lasting

effect on whether or not the child is more likely to be fearful or anxious later on in life (Center on the Developing Child at Harvard University, 2010).

Patterns and behavioural routines also guide long term health, which means that parents and carers need to think about how to promote health now for long lasting benefits.

For example, if children do not brush their teeth now, spend many hours in front of the screen on a regular basis or regularly eat food with low nutritional value, then the chances of those children carrying on in the same way once they are adults, are rather high. However, if children experience safe, positive and nurturing environments, with good role models then those preventative measures lead to a reduction of medical intervention later on (Center on the Developing Child at Harvard University, 2010).

Let's consider some important practicalities. To provide a safe chemical environment we need to reduce chemicals in children's life's, starting from pre-conception, as an exposure to chemicals influences the development of organs in utero already. Malformations at this stage can become manifested and be passed on to the next generation (Gilbert-Barnes, 2010). Examples of such influences include lead poisoning of the mother, even before pregnancy, infections of the mother during pregnancy or either parent before conception, exposure to harmful chemicals of either of the parents before contraception.

The physical and built environment includes home and daycare, access to healthy food, neighbourhoods with parks and playgrounds big enough to be away from traffic and the related air pollution, opportunities to play and socialise with other children and families and thus social ties outside the home. The saying "It takes a village to raise a child" is very fitting as such communities increase the likelihood of physical and social activities. These communities also tend to have a better lifestyle and develop a collective efficacy (or social capital), where people collaborate for the common good. Those efforts lead to a communal will to do good, to do well and thus has a direct influence on children's and families' wellbeing (Center on the Developing child at Harvard University, 2010).

Children grow up in a family, and those families function within a community. Therefore, they are influenced by the commitment, skills and knowledge resources and the capacities of the community. While much attention has been paid to the development of suitable policies, it is worth noting that policies are unlikely to work without active engagement of the caregivers and the community, so that children experience an environment that collectively moves in the right direction (Ministry of Health, 2008). When we consider caregiver capacities, key point to consider is the quality of relationships between a child and a caregiver in and outside the family. Some influential factors involved can be time and commitment, resources available, for example, finances but also psychological resources, and skills and knowledge of the caregivers (Ministry of Health, 2014).

The last point here is appropriate nutrition, which is a basic right of every child (United Nations Convention on the rights of the child, 1989). What needs to be understood though is that being overweight or obese in childhood, or being raised in an obesogenic environment has long lasting, damaging effects in adulthood and that those effects can be passed on generationally as well (Ministry of Health, 2015; Center on the Developing Child at Harvard University, 2010).

Policy and program levers for innovation

All of the discussed domains rely on a strategic investment that builds the capacities of families and communities. This idea does not diminish the importance of primary health care for all children or high quality medical care for those who are ill. However, ill health and disease in children cannot be addressed by general practitioners or hospitals

alone, but, as research indicates (Center on the Developing Child at Harvard University, 2010), needs to be addressed from a prevention point of view. Importantly, policies that support stable and responsive relationships can be developed through parenting education and home visiting programs beyond Plunket; parental leave policies; income support reflecting the family's living cost; expanded professional development for the early childhood education providers and teachers. Policies that assure safe and healthy environments for the children are based on meeting health and safety requirements for early care and education programs; physical features of a community (grocery stores selling fresh fruit and vegetables at an affordable price, bicycle paths, safe play grounds); laws and safety regulations for commercial products (think children's car seats, toys, prams); laws around fast food outlets and the cost of and access to nutritionally sound food.

Conclusion

While there is a growing understanding within our society of adult health promotion and disease prevention, the link to the early years is obviously less well established. The interrelatedness of the various influences to child wellbeing highlights the necessity of a not just medical intervention to support child wellbeing but also requires policies in a range of other areas, such as public health, early childhood education, child welfare, mental health, primary health care, workforce development, housing, urban planning and many others. It is fair to conclude that when all those concerned with the wellbeing of children and therefore the wellbeing of families, communities and society collaborate, no child should fall through the grid any longer. To end with a quote from the Center on the Developing Child at Harvard University (2010, p. 20), "The stability, prosperity and sustainability of a society depend on the healthy development of its population", a notion that is also supported by *Te Whāriki* (MoE, 2017, p. 26), which states, "All children have the right to have their health and wellbeing promoted and to be protected from harm".

References:

- Allison, N. (1999). *The Illustrated encyclopedia of body-mind disciplines*. New York, NY: The Rosen Publishing Group Inc.
- Bennett, J., Hollister, M. & Warren, C. (2001). *Medieval Europe: A short history*. New York, USA: McGraw-Hill.
- Berk, L. E. (2014). *Development through the lifespan*. (6th Ed.) New York, USA: Pearson.
- Berk, L.E. (2017). *Development through the lifespan*. (7th Ed.) New York, USA: Pearson.
- Center on the Developing Child at Harvard University. (2010). *The foundations of lifelong health are built in early childhood*. Publisher: Author.
- Durie, M.H. (1985). A Māori perspective of health. *Social Science Medicine*, 20(5), 483–486.
- Education Council. (2015). *Graduating teacher standards*. Retrieved from <https://educationcouncil.org.nz/sites/default/files/gts-poster.pdf>
- Education Council. (2017). *Our code, our standards: Code of professional responsibility and standards for the teaching profession*. Publisher: Author.
- Gendron, B., Kouremenou, E., Rusu, C. (2016). Emotional capital development, positive psychology and mindful teaching: Which links? *International Journal of emotional education*, 8(2), 63-74.
- Gilbert-Barness, E. (2010). Teratogenic causes of malformations. *Association of clinical scientists*. Retrieved from <http://www.annclinlabsci.org/content/40/2/99.full>
- Hinrichs, T.J., & Barnes, L.L. (2013). *Chinese medicine and healing: An illustrated history*. Cambridge, MA: Belknap Press of Harvard. University Press.
- Howell, T., Auger, M., Gomes, T.M., Brown, F.L., & Leon, A.Y. (2016). Sharing our wisdom: A holistic aboriginal health initiative. *International Journal of Indigenous Health*, 11(1), 111-132.
- Cho, E. (2015). Children’s wellbeing in east and southeast Asia: A preliminary comparison. *Social indicators research*, 123(1), 183-201.
- Kvalsvig, A., D’Souza, A., Duncanson, M., & Simpson, J. (2015). *Pathways to child health, development and wellbeing: Optimal environments for orchids and dandelions. An overview of the evidence*. Wellington: Ministry of Health.
- Ministry of Education. (2016). *Licensing criteria for early childhood education and care centres 2008*. Retrieved from <https://www.education.govt.nz/early-childhood/running-an-ece-service/the-regulatory-framework-for-ece/licensing-criteria/centre-based-ece-services/>

- Ministry of Education. (2017a). *Education (Early childhood services) regulations 2008*. Retrieved from <http://www.legislation.govt.nz/regulation/public/2008/0204/latest/DLM1412501.html>
- Ministry of Education. (2017b). *Te whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa: Early childhood curriculum*. Wellington, New Zealand: Author.
- Ministry of Health. (2008). *Understanding health inequalities in Aotearoa, New Zealand*. Dunedin, New Zealand: Otago University Press.
- Ministry of Health. (2014). *Preventative health/wellness*. Retrieved from. <https://www.health.govt.nz/our-work/preventative-health-wellness>
- Ministry of Health. (2015). *Childhood obesity plan*. Retrieved from <https://www.health.govt.nz/our-work/diseases-and-conditions/obesity/childhood-obesity-plan>
- Ministry of Health. (2017). *Māori health models – Te whare tapa whā*. Retrieved from <https://www.health.govt.nz/our-work/populations/maori-health/maori-health-models/maori-health-models-te-whare-tapa-wha>
- Minniss, F.R., Wardrope, C., Johnston, D., & Kendall, E. (2013). Promoting health in early childhood environments: A health promotion approach. *Childcare in practice, 19*(2), 104-117.
- Nagel, M.C. (2012). *Nurturing a healthy mind: doing what matters most for your child's developing brain*. Titirangi, New Zealand: Exile Publishing Pty Ltd.
- Oranga Tamariki/Ministry for Children (2017). *Vulnerable Children Act 2014*. Retrieved from <http://www.legislation.govt.nz/act/public/2014/0040/latest/whole.html>
- Pere, R.R. (1997). *Te wheke - A celebration of infinite wisdom*. Wairoa, NZ: Ao Ako Global Learning NZ with the assistance of Awareness Book Company.
- Pulotu-Endemann, F.K. (2001). *Fonofale model of health*. Retrieved from <http://www.hauora.co.nz/resources/Fonofalemodelexplanation.pdf>
- Santrock, J. (2015). *Life-span development* (15th Ed.). New York, USA: McGraw Hill.
- Shonkoff, J.P. (2010). Building a new biodevelopmental framework to guide the future of early childhood policy. *Child Development, 81*(1), 357-367.
- Shonkoff, J.P., & Bales, S.N. (2011). Science does not speak for itself: translating child development research for the public and its policymakers. *Child Development, 82*(1), 17-32.
- The United Nations (1989). *Convention on the rights of the child*. Retrieved from <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx>
- Wood, M. (2004). *The practice of traditional western herbalism*. Berkley California, USA: North Atlantic Books.