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# Towards a child-centred public health: Lessons from rheumatic fever prevention in Aotearoa New Zealand

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**Abstract**

Children's perspectives rarely appear at strategic levels in public health. Policy-makers can hold adult-centric assumptions about children, and may be uncertain about how to interpret and apply children's perspectives in policy. Yet how children experience and perceive health interventions can shape the success of services. What, then, might child-centred approaches to health policy consider? Through ethnographic work in New Zealand, I document how children engage with a school rheumatic fever prevention service, and provide a framework of three lenses through which policy-makers can more meaningfully consider children's perspectives on health: (a) The embodied-child; (b) the social-child, and (c) the public-child.

KEYWORDS

child-centred approaches, New Zealand, public health, public policy, rheumatic fever

## INTRODUCTION: HOW DOES PUBLIC HEALTH VIEW CHILDREN?

A growing body of research has engaged with children to better understand their perspectives on health, and to include them as stakeholders in developing health interventions (e.g. Hampshire & Matthijsse, 2010; Hieftje, Duncan, & Fiellin, 2014; Martin et al., 2018; Persson, Haraldsson, & Hagquist, 2016). When done well, this work can generate unique insights that can shape approaches towards improved child health and well-being (Mengwasser & Walton, 2013; Witten & Field, 2020). However, a recent review of health intervention studies with children in middle childhood found that even when children participated, there remained substantial opportunities to include or more deeply consider children's needs (Hunleth et al., Under review). This review suggests that engagements where children's participation is tokenistic, diminished or superficially interpreted or reported could be strengthened not only through more rigorous qualitative methodologies, but by grounding analysis in deeper engagement with childhood theory. For example, an often uncritical emphasis on ‘voice’ may conflate children's ability to speak with their ability to be heard, understood and have their needs taken seriously as part of policy design, especially given the constraints of adult systems and the realities of unequal power distribution. Similarly, the rhetoric of considering children ‘experts on their own lives’ has been used to justify children's participation in research, but researchers may expect of child participants levels of self-awareness and insight that even adults do not usually hold (Gallacher & Gallagher, 2008). Like adults, children internalise broader social norms, discourses or ideologies, and these permeate children's discourse (see Coles, 1986). Children's voices must therefore be interpreted through critical perspectives on power, knowledge production or embodiment that children may not explicitly articulate.

Accomplishing such approaches is logistically and intellectually challenging, and may be more frequently attempted with adolescents or at grassroots policy levels, for example, in the development of school health policy or local town planning. Younger children are less commonly invited to substantially shape intervention design or effect change in large-scale or national health policy, even when other community stakeholders, such as caregivers, are consulted. Scholars have noted that an adult-centric approach to public policy, compounded by children's lack of advocacy power and sector constraints of timeframes, budgets, political negotiation and hierarchical structures, means that children are usually invisibilised at higher levels of public decision-making (Carroll, Witten, & Stewart, 2017; Witten & Field, 2020). Already tasked with negotiating adult concerns, there may be little incentive within such top-down approaches to consider children as more than passive recipients of care.

Yet neglecting children's perspectives has important consequences, not only for children's well-being and experience, but for an intervention's success. I argue that good child health policy should be predicated on regard for children as whole people: as social actors and participants in public life, whose experiences, understandings, interpretations and practices *matter* and can mediate the effectiveness of policy interventions. The solution to these limitations within ‘top-down’ approaches, however, is not to simply consult children as per ‘bottom-up’ approaches. Rather, policy at all levels and targeting diverse goals requires greater attention to the assumptions of childhood. This would ideally involve children as stakeholders or research participants, but moreover, this means including adult partners equipped with critical understandings of childhood, who can ask children the right questions and sensitively interpret the answers.

In this paper I provide a framework for a child-centred approach to children's inclusion in public health policy and interventions. My aim is not to comment on methodologies since these are already discussed across multiple literatures (Christensen & James, 2000; Coyne & Carter, 2018). Instead, I combine empirical data from an ethnographic study of children's engagement with health care interventions in Aotearoa (New Zealand), together with childhood studies theory, to assemble three lenses through which policy-makers may reconceptualise children in health care. These separate but interconnected analytical lenses comprise (a) The embodied-child, which attends to how children construct knowledge in relation to their bodily experience; (b) The social-child, which considers children as participants in relationships; and (c) The public-child, which sees children as members of society and participants in public life. This framework stimulates a kind of *thinking* about children that can inform, for example, how policy-makers ask after, interpret and apply children's perspectives within public health.

## CHILD-CENTRED APPROACHES AND PUBLIC HEALTH POLICY

Child-centred approaches emerged from what is often termed the new social studies of childhood (James & Prout, 1990), which positions children as more than 'adults-in-waiting'; as competent social actors with agency who actively negotiate their own lives. Subsequent child-centred studies have articulated a disjuncture between how adults construct childhood—particularly in the West—and how children see themselves. From many adult perspectives, children are conceptualised as passive recipients of adult actions, moulded by adult culture, their developing bodies assumed to reflect an inherent innocence, vulnerability and incompetence (James, Jenks, & Prout, 1998). As extensive social science literatures demonstrate, this view of childhood is not consistent across space and time, but is embedded throughout the apparatus of Western societies, where children tend to be cordoned off into schools and homes and excluded from public life and decision-making, often in the name of protection from risk (James & Prout, 1990). These assumptions of vulnerability, incompetence and passivity also form the basis for policy and professional decisions predicated on determining 'what's best for the child' (Smith & Gollop, 2001). By contrast, the United Nations Convention on the Rights of the Child has challenged the routine exclusion of children from public life and policy, recognising children's rights to respect for their dignity, autonomy and competency, and advocating for their right to participate and be heard about matters that concern them.

This challenge has been variably met across the professional and academic sectors. Efforts to promote child-centred approaches appear in social work (D'Cruz & Stagnitti, 2008), community planning (Chawla & Driskell, 2006; Witten & Field, 2020) and health care, particularly paediatric nursing (Coleman, 2010; Foster & Shields, 2019). While children have also been increasingly included within studies of health experiences, their perspectives remain peripheral in public health policy. Scholars have described international trends towards an 'elevation' of children in neoliberal public policy targeting 'at-risk' children for early intervention within social-investment models, where interventions focus on caregivers or professionals (Keddell, 2018; O'Brien, 2016). The concern here is less on improving children's lives and experiences, and more on reducing future costs to the state, an ideology, as Cheney (2017) suggests, established on perceived measurability of numbers and not on recognition of children's rights, experiences or contributions. These policies are therefore child-*focused*, in that children are seen as the objects of intervention, rather than child-*centred*, where the interventions would be designed—and their impacts considered—with children's perspectives in mind (Söderbäck, Coyne, & Harder, 2011).

Meanwhile, children have perspectives and experiences that adults may not predict, and that may differ from what their parents know, anticipate or hope for. A growing literature in the anthropology of child health demonstrates that children agentively negotiate their health and develop their own understandings and practices, which may have unexpected interactions with adult interventions (Bluebond-Langner, 1978; Hunleth, 2017). Children's exclusion, therefore, engenders not only breaches of participation rights, but policies and interventions that are inadequately tailored to the children they target.

However, policy-makers and researchers outside childhood studies may be unsure of *how* to include, interpret and apply children's perspectives to policy or intervention development. In Aotearoa, for example, Fitzmaurice (2017) notes the lack of *participation ecosystem*—the participatory culture, infrastructure, understanding and research needed to allow children's perspectives to meaningfully shape institutions, practices and services. Policy-makers may also be unsure of how to reconcile perceived incompatibilities between children's perspectives and public health goals, assuming, perhaps, that if children dislike injections, then a public health that is attentive to their perspectives must preclude immunisation programmes, as opposed to identifying where the goals of children and immunisation policy overlap and asking how we might make vaccination a more positive experience. Developing a participatory ecosystem therefore requires a process of reconceptualising children: of critically identifying and bracketing adult-centric assumptions towards thinking from *children's* perspectives, and then interpreting and translating children's perspectives into thoughtful policy.

## PUBLIC HEALTH IN CONTEXT: PARTICIPANTS AND METHODS

Towards this reconceptualising, I draw from ethnographic data collected during 1 year of fieldwork at a primary school in 2015. ‘Tūrama School’ (all names are pseudonyms) is located in a South Auckland area characterised by stark inequities, and designated as a ‘decile one, step A’ school, indicating the highest of the 18 levels of socioeconomic disadvantage used by the Ministry of Education to allocate funding. Comprising approximately 75% Indigenous Māori and 20% Pacific students, Tūrama School's roll reflects ethnic segregation and socioeconomic disparities that stem from Aotearoa's history of colonisation and institutional racism, compounded by decades of neoliberal economic reform that have disproportionately affected Māori and Pacific families (Poata-Smith, 2013). These economic inequalities translate into health inequities (Reid, Cormack, & Paine, 2019), making Tūrama School a target of numerous state and NGO-run health interventions, including a dental service, charity-sponsored ‘spare-lunches’, head lice checks and treatment, and ‘milk-in-schools’ and ‘fruit-in-schools’ programs.

Although the children of Tūrama School mainly represent Indigenous and non-Western cultural groups, they live in a colonised country where child health policy is predominantly governed by Western adult notions of childhood. To understand how children experienced these interventions, I positioned myself as an ethnographer and ‘classroom helper,’ aiming to understand children's health experiences while participating in daily school life. With institutional ethics approval, I conducted participant-observation alongside 150 children aged between 8 and 12 years old, making daily notes about the 82 children who had assented and their parents consented. I also interviewed 38 children, seven school staff and six caregivers who accepted my open invitation (see Spray, 2020). I did schoolwork alongside children in classrooms and several mornings a week observed the school ‘sore throat’ clinic. I found the value of these child-centred ethnographic methods lay not only in hearing children's perspectives in interviews, but building long-term relationships, witnessing children's encounters, and triangulating what children told me with what I observed them *doing* (Spray, 2018). These methods follow the anthropological tradition of ‘being there’ (Geertz, 1988; Trnka, 2020), where through combining embodied and spatially located experience with other forms of data, I constructed an understanding of children's encounters with health care services from multiple perspectives. Although I focus here on rheumatic fever (RF), the lived experiences of illness and health care intersect with multiple forms of illness, social experiences and forms of health promotion—in contrast with the isolated disease focus of many public health approaches. Because children do not experience the RF programme in isolation, it is necessary to contextualise my analysis with supporting data from other health issues and services.

From this situated position, I was able to identify three main assumptions about children that had unintended implications for health service delivery: that children understand and experience their bodies in the same way as adults; that children do not have social lives; and that children are not present in public life.

## CHILDREN'S EXPERIENCES OF PUBLIC HEALTH IN SCHOOLS

Operating out of a disused classroom since 2014, the school ‘sore throat’ clinic forms part of a national strategy to prevent RF, an autoimmune disease that can develop after group A streptococcus infection (GAS) of the throat (strep throat) or skin. Mainly affecting children aged 5–14, rising rates of RF in Aotearoa among Māori and Pacific children have been linked to socioeconomic deprivation (Milne, Lennon, Stewart, Vander Hoorn, & Scuffham, 2012) and overcrowding (Jaine, Baker, & Venugopal, 2011). The main target for prevention, however, has been sore throats. In 2011 the Aotearoa government initiated the RF Prevention Programme (RFPP) with the aim of cutting RF admissions by two thirds by June 2017. The program's major component targets the GAS bacteria (which can trigger RF's development) by allocating funding for free throat swabs for high-risk groups at primary care clinics and free school clinics in areas of high economic-deprivation.

The Tūrama School clinic was staffed by a community support worker, Allison, who would swab children's throats and record symptoms, and Deb, a public health nurse who would follow up any positive results and arrange for an antibiotic prescription. Sore throats were identified through two methods: firstly, through self-identification as teachers asked their classes everyday ‘who has a sore throat?’ and informed the clinic, and secondly, through class checks, where twice a term Allison would visit a class and visually check each child's throat.

During my time in the clinic, I observed most children have a warm and affective experience of care. Allison would joke with waiting children, let them take their own temperature with the electric ear thermometer, and patiently answer questions. I watched Deb one morning gently peel the wet socks off a young girl and, hiding her dismay, tenderly clean and bandage the impetigo sores that covered the girl's feet and legs. In the absence of a general health service, children also came to the clinic with myriad ailments, and although funding was allocated exclusively for throat and skin checks, the nurses accepted that they inevitably needed to cover other health needs wherever possible. The clinic staff therefore embodied a child-centred practice, enacting relational care tailored for young people. At a strategic level, however, the needs of children disappeared from the RF prevention policy which saw children as passive targets of intervention, and only considered their experiences at the point of care. The consequences of this approach emerged when, after seeing a particularly large group of children 1 day, Allison and Deb sighed, perplexed over children identifying sore throats *too often*, sometimes on a daily basis, but rarely testing positive for strep. Although I could not assess the distribution of swabs taken for privacy reasons, the raw number of swabs the clinic took over the course of my fieldwork averaged seven swabs a year for each child—a number far fewer than the actual instances of children self-identifying with sore throat, since children were not re-swabbed if they were waiting for lab results or already on antibiotics. District-wide evidence also showed that while swabbing numbers had increased over the period, the proportion of swabs returning a positive result had decreased (Anderson et al., 2016). The main concern was economic, as the swabs cost about $15 each, but children's regular clinic visits were also intruding into teaching time, and the clinic staff suspected children just wanted to get out of class. Yet Allison was hesitant to not swab a child who reported a sore throat and risk RF.

Allison's dilemma here reflects a broader set of problems in public health, where interventions are often implemented with good intentions, but less consideration of how children will perceive, experience and engage with the services. For the majority of Tūrama School's interventions, children's agency is underestimated and they are largely imagined as passive recipients of whatever care adults deem appropriate; ultimately, children use such services differently than adults might hope. Below, I elaborate three lenses that, if applied as part of a child-centred approach to public health, may have anticipated such issues, and resulted in a different approach to RF prevention.

## THE THREE LENSES

### *The embodied*-child

The first lens views health interventions from children's embodied perspectives, recognising that while childhood is a social construction, the immaturity of children's bodies is not (James, 1998), and so children's embodied experience of the world is distinct from that of adults. Children inhabit bodies that are usually smaller, less powerful and more frequently changing than adults'. Children also have fewer years of embodied experience, and are still developing the skills to interpret changes and the range of sensations their bodies produce (Christensen, 1999). These bodily differences then constitute distinct ways of making sense of the world (Csordas, 1990). Furthermore, education scholars have long recognised children as active constructors of knowledge, who educate themselves through engagement with their world (Vygotsky, 1978). Children draw information from their environment as well as internal information from their own bodies, and produce understandings through processes of ‘bricolage’ (Christensen, 1999), often collectively in peer cultures or with siblings.

This ‘bricolage’ process became highly implicated in children's engagement with the Tūrama School clinic. The RF program is based on a school-based pilot study's non-significant reduction of RF cases in Northland (Lennon, Stewart, Farrell, Palmer, & Mason, 2009) and a meta-analysis of six mostly American community or school swabbing programs in the 1970s (Lennon, Kerdemelidis, & Arroll, 2009); it hinges on identifying streptococcus A infection through sore throat. Recognising that sore throats are often perceived as a common, innocuous symptom of childhood illness, the promotional campaign's main aim was to convince parents to take sore throats seriously. ‘Sore throats can kill’ read the taglines: ‘if your child has a sore throat, take them to a doctor.’

Yet the focus on sore throats as the point of entry to health care is underpinned by adult-centric assumptions of how children—and families—will do the work of identifying sore throats. Sore throat is a subjective and polysemic symptom, produced through complex bio-psycho-social processes, from perception of the body to interpretation of cause. This means that children construct understandings and interpretations of sore throats that may be quite variable, culturally patterned and distinct from the biomedical model.

In a Danish school context, Christensen (1999) theorises how children learn to interpret their experiences of their bodies, describing how adults help children learn to ascertain ‘illness’ from ‘sickness’. While ‘illness’ denotes the subjective experience of feeling unwell, identifying ‘sickness’ involves classifying sensations into culturally specific categories of disease. By asking questions and using diagnostic tools such as thermometers, adults distinguish between children's complaints as ‘sick’ or ‘not sick’, and children learn to translate their own experiences into biomedical models of sickness: ‘asthma’ versus ‘unfitness’; ‘tummy bug’ versus ‘hungry’; headache due to a cold versus dehydration.

Christensen sees children's learning as a process of linking subjective embodied experiences to the information that peers, parents, teachers and doctors give them about the body, including names for and conceptions of symptoms, diseases or injuries. When adults are not specific enough in linking experiences and terms children can arrive at quite different conceptions of illness. For example, many Tūrama School children offered understandings of asthma based on the time an adult ‘told’ them they had asthma. Children did not tend to parse out the same cluster of symptoms as the biomedical model, or even their parents, and instead frequently associated asthma with ailments like vomiting, itchiness, headache, sore throat or heart problems. While children reported that they knew they had asthma because a doctor or parent told them so, it seems the adult did not necessarily explain which aspect of the child's illness was the ‘asthma’. ‘Asthma’ therefore became associated with whatever children were experiencing during that illness episode.

Likewise, during interviews children expressed varied conceptions of sore throat, some of which reflected the biomedical model of sore throat, but many of which did not. Many children associated sore throat with cold and flu symptoms, and did not necessarily distinguish a sore throat from the whole experience of sickness. Eleven-year-olds Tristan and Navahn described sore throat as 'colds and fever[…] and these lumps', and 'when you're coughing and stuff. And your throat gets hot and that.' When I asked 9-year-old Anton, 'tell me about sore throat', he replied, 'Sore throat, you get it from like, coughing and that? Something in your like, throat? But this is like, coughing, sneezing.' Ten-year-old Alzea identified a sore throat not in terms of *pain*, but as an effect on her voice, describing it as when'your voice changes like something blocking.'

Children also constructed their understandings of sore throat in relation to perceived causes. Some children had a conception of germs, and 9-year-old Jordyn ascribed her sore throat to the 'sore throat bug' she imagined as a large insect inhabiting her throat. However, many children connected sore throat to non-viral or non-bacterial causes such as 'when you're allergic to something and you eat it,' or 'if you don't drink properly.' Ten-year-old Tupono suggested swallowing 'fish bones' as a potential cause of sore throat, while 9-year-old Amberlee thought sore throats were caused by yelling, so she tried talking less.

Although children did tend to be able to locate their throat in their body, this was not always the case either, as 10-year-olds Jackson and Whetu talked about 'sore lungs' and 'sore chest', associating sore throat with breathing: 'like I'm 'haling other stuff?' It is plausible that younger children or children for whom English is a second language may be even less likely to know what their throat is.

These varied and broad understandings of sore throat were further verified through the clinic processes. After the teacher sent their names to the clinic, Allison would call the children to be checked. Children would experience being weighed (to determine the antibiotic dose), having their temperature taken, and their throat inspected with a torch and swabbed. 'Do you have a sore throat?' Allison would ask them, and when they assented, she would circle 'sore throat' on their form to record the reported symptom, along with any other symptoms she had observed. However, from the children's perspectives, Allison's circling of 'sore throat' after this suite of procedures functioned to verify their diagnosis of 'sore throat'. Nine-year-old Amberlee told me, 'And every time I come here, she [Allison] puts me down as… a redness and swollen… 'cause I watch her, and when she does that it actually kind of freaks me out.' She is frightened, she told me, because 'I might have strep throat like the boy [in the campaign poster]', because 'maybe you can die.' The message Amberlee receives, then, links her subjective 'illness' experience to a new understanding of 'sickness' which tells her that her sore throat is real, and she may become like the boy in the advertisement who had heart surgery and almost died.

From children's perspectives, therefore, it is not a simple matter to identify and swab children's sore throats. Children may not know which aspect of their experience is the 'sore throat', may not differentiate between infection and injury causes, and may infer diagnosis and even prognosis from the process of linking their bodily experience to a media campaign. If policy-makers can distinguish the differences in children's embodied experiences, they can start to identify the adult assumptions that create gaps in intervention strategies, consider what interventions are asking of children and what children might need to know, and foresee ethical or practical consequences of interventions.

## The *social*-child

The second lens views children as social actors who actively build and negotiate their relationships with adults and other children. The childhood social sciences have long documented the way that children actively construct their own social worlds with complex social rules and cultural practices distinct from those of adults (Corsaro, 1992; James, 1993). In collective peer cultures, Tūrama School children constructed social meanings around the health services they experienced; conversely, the degree to which services accounted for these meanings influenced children's engagement. For example, children associated the 'spare-lunches' offered to those without lunch with being 'pōhara' (poor), forcing them to choose between hunger and social stigma (most chose hunger; Spray, 2020). While the head lice service was also highly stigmatised, the delivering organisation had deliberately designed the program to protect the identities of the children using the service, and staff took great care to treat children sensitively and in private. This service had an unexpectedly successful engagement because the negative social implications of children's participation were avoided.

As people with complex social lives, children will also appropriate spaces—including those created through health interventions—to facilitate their sociality. At Tūrama School, the sore throat clinic became such a space as children were summoned in groups. The clinic had several tables with books and a few toys to occupy waiting children, as well as office chairs. Although the staff tried not to let the space seem 'too' fun, children are masters of creating their own playgrounds, and taking turns on the swivelling office chairs was a popular activity. Children did not need to play, however, and could simply sit and talk, enjoying their freedom from the classroom and a break from work. When classrooms were not a fun or peaceful place to be, the clinic offered respite. The clinic staff were frustrated by large numbers of children self-identifying with a sore throat from two classrooms in particular, and from my participant-observation within these classrooms I could understand the clinic's appeal; both classes were taught by very authoritative teachers who tended to maintain control through shouting.

It was not only about escaping the classroom's constraints, however; the clinic also offered an opportunity to further peer relationships. Children put significant energy into negotiating the complex, stratified and gendered social ecologies they co-create with peers (Adler & Adler, 1998; Spray, Floyd, Littleton, Trnka, & Mattison, 2018). For example, in 10-year-old Ruby's class, the girls' social ecology was structured around a core group of six, who tended to be the oldest, most academically successful, and most socially competent. These girls had organised themselves into a tight unit with explicit rules governing their behaviour ('don't hang out with the haters') and roles for each member, including a captain, co-captain, and 'choreographer'. All, or subsets of the six girls would often go to the clinic together 'to get out of work' and after being checked, each girl would wait for the others before returning to the classroom. 'I like waiting,' Ruby told me, and while I didn't see the children do very much in the 10 min or so, it seemed like social connections were solidified in the small talk and mundane moments of *being there* together (Figure 1). Meanwhile, Ruby's classmate Amara, a new migrant who floated nervously on the edges of social circles, confided with a giggle that *sometimes* she wanted to get out of class. On several occasions I observed her accompanying some of the core six to the clinic, beaming shyly and saying little. While Ruby's group would simply go off together at lunchtime, leaving Amara to trail after them, a visit to the clinic could offer a few moments to connect with group members, in the hope that they might come to include her. *Being there*, therefore represented an opportunity for togetherness, for maintaining a relationship or forging a new one, and a symbol of social status and belonging.

This second lens also requires consideration of how illness and health care create particular social identities which shape social relations between roles. As medical anthropologists have noted, moments of illness bring to the fore social notions of intimacy, weakness and vulnerability that we associate with feeling unwell. In doing so, illness events also accentuate children's social relations: their status, hierarchies and relationships, within peer cultures as well as intergenerationally.

Beside being caring, kind and friendly, Alison and Deb also represented maternal figures, offering forms of affective care associated with mothers, and holding the position and tools (medical equipment) of authority. Upon visiting the clinic, children were therefore relationally positioned as

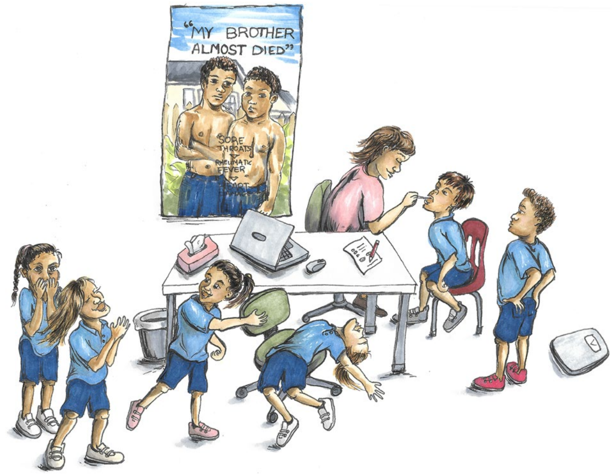

**FIGURE 1** "Being there." Children attending the Tūrama School clinic. Illustration by the author [Colour figure can be viewed at wileyonlinelibrary.com]

the submissive, vulnerable child in the dynamic. The clinic procedures reinforced this vulnerability: first, children were examined in a group, making public their receiving of care. Second, children were weighed in order to determine the dose of antibiotics. While younger children reasoned that this was done 'to see how much I've grown,' and interpreted the weighing as a form of adult care and monitoring of their development, older children, already self-conscious about their changing bodies, felt embarrassed and vulnerable by the public nature of this process. Children then had to sit still, open their mouths, and brace themselves for the uncomfortable throat swab. All of these processes represent a submitting of bodies to adult care, marking the submissive as *children*.

This child role did not match all children's social identities, however. While younger children generally embraced this role, even seeking visits to the clinic in order to enjoy the maternal care and concern they would receive, older children, who were attempting to leave childhood and forge a new autonomy, were dragged into a socially regressive position. As such, younger children were more likely to come voluntarily to the clinic, while Allison needed to actively follow-up with older children in class checks.

A perspective that includes children's peer sociality might see how children appropriate a government health intervention into their own social business, transforming a sore throat clinic into a forum for networking. The social-child lens also sees how an intervention positions children socially, and considers how children might navigate this according to their needs and perceived social identities. By being aware of and attuned to this likelihood, policymakers can consider how they might negotiate—or take advantage of—the dynamics of children's sociality in health spaces.

## The *public*-child

The third lens, the public-child, reminds us to view children as participants in public social life. That we should need reminding of this points to children's position in Western society; elsewhere around the world, children can be fully integrated into public life and economic contributors of labour or resources (e.g. Kramer, 2005). By contrast, scholars have noted that in the West children are more likely to be excluded from public life, sequestered into 'child-spaces': schools, playgrounds and holiday programs (James, 1993). The effect of this segregation may be a normalising of children's absence in adult worlds to the point where children become invisible. Yet they are still present, watching and interpreting public discourse and media messages.

At Tūrama School, the degree to which children heard and internalised public discourse was evident in the ideas that were threaded through children's talk and woven into their collective knowledge production. Teachers shared and discussed media articles with classes, and children could be quite politically aware: 9-year-old Amberlee recounted to me a news article her teacher had shared about a scandal involving Prime Minister John Key playing with a young girl's hair. ‘And I think that's pretty awkward for a Prime Minister to do that,’ she told me. Amberlee's interest in the story also reflected children's particular fascination with anything that featured—or could be seen as a threat to—children.

Yet public health messaging in particular has a habit of using children in order to motivate parents, while neglecting to consider children as viewers. This is a global problem, for example Hunleth (2017) notes that because HIV discourse in Zambia so often highlights the consequences of orphanhood, even children who were *already* orphans expressed fear of becoming an orphan. Another recent and controversial example can be found in Australia's April 2019 Heart Foundation Campaign, which was withdrawn following backlash against scenes showing a mothe putting her child to bed saying, ‘every time I told you I loved you I was lying — you are not my priority.’ Such campaigns reflect an adult-centrism in public health, where children are either forgotten or assumed not to hear the messages. Yet the fact that children are featured means that children are *more* likely to notice and remember the messages; children are in fact inadvertently *targeted* by such campaigns.

New Zealand's RF campaign was developed through consultations with Māori and Pacific parents and health leaders, and was tested on the ‘target audience’ of *parents*. However, the campaign features two young Tongan boys who look, sound, and play rugby league like the children at Tūrama School. Consequently, the children identified with the boys in the advertisement, absorbing its message to the point where many children could recite the campaign messaging verbatim.

Eleven-year-old Pikau described: ‘when you got a sore throat, and if it gets really bad, it will go to… RF and then heart damage.’ She told me she had learned this information from the campaign:

> I’ve seen the video on TV. It’s really sad how there’re twin brothers and their brother had to go into surgery to get his heart tested, or something? A test. But he had surgery. And they didn’t know if he was going to survive or not.

This death part particularly captivated children. Pointing to the poster, 10-year-old Jackson told me sore throats were important, ‘… for your heart damage’ because'you might end up like him—he nearly died!’

Despite its critical role in RF, only some children held any concept of strep throat. Strep throat was also absent from the campaigns; consequently, many children, after receiving antibiotics, inferred that they now had RF. Several children told me about their past history of ‘RF’, but then would go on to describe an experience of having their throat swabbed and taking antibiotics for 10 days. ‘They checked me and then the day after they came to my house and said that I had RF,’ explained 10-year-old Cassidee after I asked about her experience of the clinic. This was in fact the protocol for strep throat, but these children believed that they were a step away from heart damage and death. Nine-year-old Anton told me he knew about ‘heart damage, ‘cause I just had that before. For just like 2 weeks.’

Because children would share their ‘diagnosis’ with their peers, the effect was to increase perceptions of the risk of sore throat progressing to RF. ‘Jackson has RF’ hissed one girl across the classroom after her peer was called to the clinic to collect his antibiotics. Children would also commonly attribute to the illness or deaths of family members to RF. However, incidences of RF are relatively rare, and it would be extremely unusual for a child to die from acute RF. The media campaigns therefore emphasised the most extreme and unlikely outcome, creating a sense of the disease as much more commonplace, inevitable and deadly than the epidemiological data would suggest.

This is particularly problematic as these are the same children whose security is already most threatened. As a result of economic inequities, institutional racism and colonisation, mortality rates for Māori and Pacific are about 7.1 and 6.6 years younger than for non-Māori or non-Pacific, respectively (Statistics New Zealand, 2015). These statistics are reflected in the lived experiences of Tūrama School children; five children in my cohort lost a parent in the year I did my fieldwork, while others described the deaths of infant siblings, cousins, aunts, and grandparents. For these children, death threats are real and have significant implications for their security and well-being.

Likely as a result of its framing in terms of death, many children were quite frightened of getting RF, and they responded to this anxiety in different ways. Some avoided the clinic. Others appeared hyper-vigilant, coming to have any minor soreness checked, 'just in case'. Ten-year-old Mila, whose father abuses her ill mother, estimated that she had visited the clinic 12 times that year, not because she felt a sore throat, but so that *Allison* could check if she had a sore throat. 'Because my mum doesn't like it when I get sick,' Mila said. This vigilance could also reach into pharmaceutical practices. Nine-year-old Jordyn told me how she thought she was going to die when she forgot to take her antibiotic 1 day. 'So I went to go take it again and again,' she explained. In an unpredictable world, going to the clinic or taking extra antibiotics are things children *can* do to cope with feelings of vulnerability, but overlooked in health policy that does not recognise children's agency.

The implications of children's internalisation of health messages may not be immediately apparent to policy-makers whose immediate goals are 'raising awareness' or 'protection' and who may view the inadvertent targeting of children as an additional benefit of the campaign. While there likely is a place for public health messaging to include children, without children's purposeful inclusion, the ethical and social implications of health promotion interventions cannot be fully considered and evaluated. The public-child lens invites policy-makers to remember that children are hearing messages in the public domain and to consider just what the 'awareness' they are raising might look like for children.

## CONCLUSIONS: TOWARDS NEW THINKING ABOUT CHILDREN

This is a picture of the children in child health policy; what we can see when we re-embed children into their lived contexts and see them negotiating health through dynamic bodies, complex social relations and influenced by the wider world. In adult-centric policy, children's invisibilisation can have negative consequences for their well-being and for the success of health interventions. Their agentive engagement with the RFPP intervention had unintended consequences: economic costs to the state of unnecessary swabbing; lost and disrupted classroom learning time; and the emotional harms of anxiety when children feared a sore throat meant death.

It could therefore benefit public health if policymakers at a strategic level were resourced with tools for thinking from children's perspectives. These three lenses invite us to see 'child-scopically' through multiple levels, beginning through eyes that are situated in a body, then through bodies within a social community, and finally, as participants in wider society.

The embodied-child reminds us that children are learning to be in a body, and actively making their own knowledge out of their experiences. Using this lens, we might ask: what symptoms or experiences of the body are we taking for granted? How might we base our communication on children's understandings of health and their body? By recognising that this intervention is predicated on requiring children to perceive, identify and report sore throats, the RF programme might have developed a child education component that draws upon children's existing knowledge and skills to include them as partners in their own health care. Alternatively, by recognising the responsibility the intervention places on children to develop particular awareness of a subjective symptom, the programme might have reconsidered the low prioritisation of primordial prevention and emphasised targeting housing inequities over sore throats (Anderson & Spray, 2020).

The social-child acknowledges that children are actively moving towards or away from relationships, and that illness is a vulnerable event that amplifies these relationships. Health care cannot be disaggregated from the social relations through which knowledge is constructed, whether that be children who share their diagnoses with peers, or a child who goes to the clinic to protect her mother. Using this lens, we might ask: what relationships do children have in this space, and how do children view those relationships? What power dynamics are operating, how are they positioning children, and how might children respond? By considering the social child, the RF clinic might have considered scheduling individual appointment times with children to de-socialise the visit and improve privacy, or factored loss of academic time into cost-benefit analyses.

The public-child lens reminds us that despite their relative invisibility and lack of power, children engage with the messaging in public life. We might ask: how will children hear this message? What will it tell them about themselves and the people they love? What might the consequences of their interpretations be? By considering the 'public child,' the RF campaign could have been designed to avoid inadvertently targeting children with threatening messages. An alternative campaign might have, for example, followed other successful national public health campaigns by leveraging humour to promote behaviour change (e.g. NZTA's viral 'Ghost Chips' road safety advertisement).

Each lens elicits unique questions, but together they illuminate how these multi-level dynamics work in concert to shape children's agentive engagement with health care. Children's embodied experiences are interpreted through frames of meaning partially generated in peer cultures. Those peer cultures, and their meanings and practices, are in turn influenced by the public discourses that filter into children's worlds. Children's engagement with the clinic can be traced from their phenomenological experiences of sore throat, to their social constructs of RF, to their encounters with the media campaign. Children interpret the media campaign from their socially vulnerable position, while their structural vulnerability arises from the social implications of their physical immaturity. Children's perspectives therefore cannot be sufficiently captured through one lens at a time. Rather, when layered together, these perspectives reveal the processes at play when child health policies meet children.

Thinking from children's perspectives means remembering that children are social actors *while* situating their agency within broader social and structural contexts; it means both listening to children *and* critically interpreting what they express so that we may translate their situated viewpoint into policy that is sensitive to their needs. Finally, it means incorporating children's experiences of interventions into cost-benefit analyses *so that* compromises are deliberate choices, not inadvertent consequences. These three lenses may give us a way to recognise the children in child health, to take them seriously, and to care for them well.

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## REFERENCES

Adler, P. A., & Adler, P. (1998). *Peer power: Preadolescent culture and identity*. New Brunswick, NJ: Rutgers University Press.

Anderson, A., & Spray, J. (2020). Beyond awareness: Towards a critically conscious health promotion for rheumatic fever in Aotearoa, New Zealand. *Social Science & Medicine*, *247*, 112798. https://doi.org/10.1016/j.socscimed.2020.112798

Anderson, P., King, J., Moss, M., Light, P., McKee, T., Farrell, E., … Lennon, D. R. (2016). Nurse-led school-based clinics for rheumatic fever prevention and skin infection management: Evaluation of Mana Kidz programme in Counties Manukau. *New Zealand Medical Journal*, *129*, 36–45.

Bluebond-Langner, M. (1978). *The private worlds of dying children*. Princeton, NJ: Princeton University Press.

Carroll, P., Witten, K., & Stewart, C. (2017). Children are citizens too: Consulting with children on the redevelopment of a central city square in Auckland. Aotearoa/New Zealand. *Built Environment*, *43*, 272–289. https://doi.org/10.2148/benv.43.2.272

Chawla, L., & Driskell, D. (2006). The growing up in cities project. *Journal of Community Practice*, *14*, 183–200. https://doi.org/10.1300/j125v14n01_11

Cheney, K. E. (2017). *Crying for our elders: African orphanhood in the age of HIV and AIDS*. Chicago, IL: University of Chicago Press.

Christensen, P. H. (1999). *Towards an anthropology of childhood sickness: An ethnographic study of Danish schoolchildren*. Doctoral thesis, University of Hull, Hull, UK.

Christensen, P. H., & James, A. (2000). Researching children and childhood: Cultures of communication. In P. H. Christensen, & A. James (Eds.), *Research with children: Perspectives and practices* (pp. 1–8). London, UK: Falmer Press.

Coleman, V. (2010). The evolving concept of child and family-centred healthcare. In L. Smith & V. Coleman (Eds.), *Child and family-centred healthcare: Concept, theory and practice* (pp. 1–26). New York, NY: Palgrave Macmillan.

Coles, R. (1986). *The political life of children*. Boston, MA: Atlantic Monthly Press.

Corsaro, W. A. (1992). Interpretive reproduction in children's peer cultures. *Social Psychology Quarterly*, *55*(2), 160–177. https://doi.org/10.2307/2786944

Coyne, I., & Carter, B. (2018). *Being participatory: Researching with children and young people: Co-constructing knowledge using creative techniques*. Switzerland: Springer.

Csordas, T. J. (1990). Embodiment as a paradigm for anthropology. *Ethos*, *18*, 5–47. https://doi.org/10.1525/eth.1990.18.1.02a00010

D'Cruz, H., & Stagnitti, K. (2008). Reconstructing child welfare through participatory and child-centred professional practice: A conceptual approach. *Child and Family Social Work*, *13*, 156–165. https://doi.org/10.1111/j.1365-2206.2007.00528.x

Fitzmaurice, L. (2017). Children's voices in system reform: A case study on children and young people's participation within the modernisation of child, youth and family. *Aotearoa New Zealand Social Work*, *29*, 41. https://doi.org/10.11157/anzswj-vol29iss1id190

Foster, M., & Shields, L. (2019). Bridging the child and family centered care gap: Therapeutic conversations with children and families. *Comprehensive Child and Adolescent Nursing*, 1–8. https://doi.org/10.1080/24694193.2018.1559257

Gallacher, L.-A., & Gallagher, M. (2008). Methodological immaturity in childhood research? Thinking through participatory methods. *Childhood*, *15*, 499–516. https://doi.org/10.1177/0907568208091672

Geertz, C. (1988). Being there: Anthropology and the scene of writing. *Works and lives: The anthropologist as author* (pp. 1–24). Stanford, CA: Stanford University Press.

Hampshire, K. R., & Matthijsse, M. (2010). Can arts projects improve young people's wellbeing? A social capital approach. *Social Science and Medicine*, *71*, 708–716. https://doi.org/10.1016/j.socscimed.2010.05.015

Hieftje, K., Duncan, L. R., & Fiellin, L. E. (2014). Novel methods to collect meaningful data from adolescents for the development of health interventions. *Health Promotion Practice*, *15*, 714–722. https://doi.org/10.1177/1524839914521211

Hunleth, J. (2017). *Children as caregivers: The global fight against tuberculosis and HIV in Zambia*. New Brunswick, NJ: Rutgers University Press.

Hunleth, J., Spray, J., Meehan, C., Lang, C. W., & Njelesani, J. (Under review). What is the state of children's participation in qualitative research on health interventions? A scoping study.

Jaine, R., Baker, M. G., & Venugopal, K. (2011). Acute rheumatic fever associated with household crowding in a developed country. *The Pediatric Infectious Disease Journal*, *30*, 315–319. https://doi.org/10.1097/INF.0b013e3181fbd85b

James, A. (1993). *Childhood identities: Self and social relationships in the experience of the child*. Edinburgh, UK: Edinburgh University Press.

James, A. (1998). From the child's point of view: Issues in the social construction of childhood. In C. Panter-Brick (Ed.), *Biosocial perspectives on children* (pp. 45–65). New York, NY: Cambridge University Press.

James, A., Jenks, C., & Prout, A. (1998). *Theorizing childhood*. Cambridge, UK: Polity Press.

James, A., & Prout, A. (1990). *Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood*. London, UK: Falmer Press.

Keddell, E. (2018). The vulnerable child in neoliberal contexts: The construction of children in the Aotearoa New Zealand child protection reforms. *Childhood*, *25*, 93–108. https://doi.org/10.1177/0907568217727591

Kramer, K. (2005). *Maya children: Helpers at the farm*. Cambridge, MA: Harvard University Press.

Lennon, D. R., Kerdemelidis, M., & Arroll, B. (2009). Meta-analysis of trials of streptococcal throat treatment programs to prevent rheumatic fever. *The Pediatric Infectious Disease Journal*, *28*, e259–e264. https://doi.org/10.1097/inf.0b013e3181a8e12a

Lennon, D. R., Stewart, J., Farrell, E., Palmer, A., & Mason, H. (2009). School-based prevention of acute rheumatic fever: A group randomized trial in New Zealand. *The Pediatric Infectious Disease Journal*, *28*, 787–794. https://doi.org/10.1097/inf.0b013e3181a282be

Martin, D., McNally, M., Castleden, H., Worden-Driscoll, I., Clarke, M., Wall, D., & Ley, M. (2018). Linking Inuit knowledge and public health for improved child and youth oral health in NunatuKavut. *JDR Clinical & Translational Research*, *3*, 256–263. https://doi.org/10.1177/2380084418767833

Mengwasser, E., & Walton, M. (2013). Show me what health means to you! Exploring children's perspectives of health. *Pastoral Care in Education*, *31*, 4–14. https://doi.org/10.1080/02643944.2012.731424

Milne, R. J., Lennon, D. R., Stewart, J. M., Vander Hoorn, S., & Scuffham, P. A. (2012). Incidence of acute rheumatic fever in New Zealand children and youth. *Journal of Paediatrics and Child Health*, *48*, 685–691. https://doi.org/10.1111/j.1440-1754.2012.02447.x

O'Brien, M. (2016). The triplets: Investment in outcomes for the vulnerable – Reshaping social services for (some) New Zealand children. *Aotearoa New Zealand Social Work*, *28*, 9–21. https://doi.org/10.11157/anzswj-vol28iss2id220

Persson, L., Haraldsson, K., & Hagquist, C. (2016). School satisfaction and social relations: Swedish schoolchildren's improvement suggestions. *International Journal of Public Health*, *61*, 83–90. https://doi.org/10.1007/s00038-015-0696-5

Poata-Smith, E. T. A. (2013). Inequality and Māori. In M. Rashbrooke (Ed.), *Inequality: A New Zealand crisis* (pp. 148–158). Wellington, New Zealand: Bridget Williams Books.

Reid, P., Cormack, D., & Paine, S.-J. (2019). Colonial histories, racism and health – The experience of Māori and Indigenous peoples. *Public Health*, *172*, 119–124. https://doi.org/10.1016/j.puhe.2019.03.027

Smith, A. B., & Gollop, M. M. (2001). What children think separating parents should know. *New Zealand Journal of Psychology*, *30*, 23–31.

Söderbäck, M., Coyne, I., & Harder, M. (2011). The importance of including both a child perspective and the child's perspective within health care settings to provide truly child-centred care. *Journal of Child Health Care*, *15*(2), 99–106. https://doi.org/10.1177/1367493510397624

Spray, J. (2018). The value of anthropology in child health policy. *Anthropology in Action*, *25*(1), 29–40. https://doi.org/10.3167/aia.2018.250104

Spray, J. (2020). *The children in child health: Negotiating young lives and health in New Zealand*. New Brunswick, NJ: Rutgers University Press.

Spray, J., Floyd, B., Littleton, J., Trnka, S., & Mattison, S. (2018). Social group dynamics predict stress variability among children in a New Zealand classroom. *Journal of Comparative Human Biology*, *69*, 50–61. https://doi.org/10.1016/j.jchb.2018.03.005

Statistics New Zealand. (2015). *New Zealand period life tables: 2012–14*. Retrieved from http://www.stats.govt.nz/browse_for_stats/health/life_expectancy/NZLifeTables_HOTP12-14.aspx.

Trnka, S. (2020). *Traversing: Embodied lifeworlds in the Czech Republic*. Ithaca, NY: Cornell University Press.

Vygotsky, L. S. (1978). *Mind in society: The development of higher of psychological processes*. Cambridge, MA: Harvard University Press.

Witten, K., & Field, A. (2020). Engaging children in neighbourhood planning for active travel infrastructure. In E. Waygood, M. Friman & L. Olsson (Eds.), *Transportation and children's well-being* (pp. 199–216). Amsterdam, The Netherlands: Elsevier.

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