Making Children's Mental Health a Public Policy Priority: For the One and the Many

Charlotte Waddell*, Children's Health Policy Centre, Faculty of Health Sciences, Simon Fraser University
Christine Schwartz, Children's Health Policy Centre, Faculty of Health Sciences, Simon Fraser University
Caitlyn Andres, Children's Health Policy Centre, Faculty of Health Sciences, Simon Fraser University

*Corresponding author: Charlotte Waddell, Children's Health Policy Centre, Faculty of Health Sciences, Simon Fraser University, Room 2435, 515 West Hastings Street, Vancouver, BC, V6B 5K3 Canada. Tel.: 1 778 782 7775; Fax: 1 778 782 7777; Email: charlotte_waddell@sfu.ca

Despite its profound importance for individuals and populations, children's mental health remains under-appreciated as a public policy priority, to a degree that violates children's rights. Using a working definition of policymaking as *collective ethical decision-making for the one and the many*, we elaborate by describing an individual child's story (*the one*) and reviewing the pertinent population health research evidence (*the many*). We then outline three central public health ethical challenges: (i) addressing the high prevalence and impact of childhood mental disorders; (ii) addressing the avoidable social adversities that underlie many childhood mental disorders; and (iii) addressing stark shortfalls in prevention and treatment services for children. We end with discussing opportunities for progress, including addressing the attendant children's rights issues.

Policymaking is about making and implementing collective ethical judgments.
(Greenhalgh and Russell, 2006: 35–36)

The many become one, and are increased by one.
(Whitehead, 1978: 21)

Introduction

Mental health, or social and emotional well-being, is central to the health of both individuals and populations and is particularly important during childhood, when the foundations for lifelong flourishing are being laid (World Health Organization [WHO], 2005; Hertzman and Boyce, 2010). For all children, from birth through adolescence, mental health is a resource for living and learning—essential for thriving and meeting one's potential, and essential for enabling resilience in the face of adversity (Rutter, 2006; Waddell *et al.*, 2008). Despite its profound importance, however, children's mental health remains under-appreciated as a public policy priority, arguably to a degree that violates children's rights, given global agreements on the importance of meeting the fundamental needs of all children (United Nations [UN], 1989). Using a working definition of policymaking as *collective ethical decision-making* (Greenhalgh and Russell, 2006) *for the one and the many* (Whitehead, 1978), we will elaborate by describing an individual child's story (*the one*) and reviewing pertinent population health research evidence (*the many*). We will then outline three central public health ethical challenges: (i) addressing the high prevalence and impact of childhood mental disorders; (ii) addressing the avoidable social adversities that underlie many childhood mental disorders; and (iii) addressing stark shortfalls in prevention and treatment services for children. We will end with discussing opportunities for progress, including addressing the attendant children's rights issues.

Children's Mental Health for the One

Two of us (C.W. and C.S.) care for children who are involved with Canada's child welfare and youth justice

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systems, as a psychiatrist and a psychologist, respectively. The following story is a composite, typifying the stories that we routinely hear in clinical practice, and illustrating the impact that the causes and consequences of mental disorders can have for individual children.

Tyler Learns to Play Soccer

One night while playing with matches, 10-year-old Tyler set a fire outside his neighbour's home. The home was heavily damaged and the homeowner, a popular senior citizen, was badly injured. Many community members wanted Tyler to receive criminal charges. However, because legislation only allowed for children age 12 or older to be charged, Tyler was instead referred for mental health assessment to determine what should happen next. The mental health team learned that before the fire, Tyler lived with his mother and two younger sisters. Following the fire, however, he lived in a group home where he was closely watched due to 'safety concerns'. He was also barred from school for this reason.

As a first step, the mental health team talked with Tyler. After developing rapport with him, the team learned about the many challenges that he faced. Although Tyler described having no memories of his father, he did recall his mother frequently describing him as a violent man who was 'a nasty piece of work'. Tyler's mother, who had long relied on social assistance, sold marijuana out of their apartment to make extra money. Tyler also confided that she made money from 'boyfriends'. He described looking after his two younger sisters during the times that these often loud and aggressive men were in the home. As well, he spoke about caring for his younger sisters during his mother's frequent periods of heavy drinking. Tyler expressed much worry about his sisters, saying that he often got them up for school in the morning and made food for them. His biggest concern was getting home—so he could take care of them again.

Tyler also told the team that he was happier not being in school. He said he had never liked school and had always struggled academically. School was also frustrating because he never got to do the one thing he thought he might be really good at—soccer. He did not play because his mother could not afford the uniforms and could never take him to the practices. Tyler also mentioned being given pills for 'attention deficit'. After his classmates became aware of this, they bullied Tyler, calling him names like 'psycho' and 'retard'. Tyler also described the medication as not helping with the real reason why he could not focus at school—being worried about things at home. Tyler then mentioned that workers at the group home sometimes forgot to give him his pills, which was a good thing, he said, because he was feeling better—having fewer stomach aches, feeling hungrier and sleeping better. He asked if he could be taken off the medication altogether. At a later meeting, Tyler was then asked about the night of the fire. He described lighting matches because he was 'bored', not thinking about the possible consequences. He spoke about leaving for home before he realized that a fire had started. He expressed feeling 'horrible' about injuring the senior, whom he used to visit.

Assessment of school and community records showed that Tyler had had no previous fire-setting or other serious behavioural problems. Rather, his teachers characterized him as a 'sad' and 'quiet' boy who did not cause trouble. Primary healthcare records confirmed that Tyler had been receiving very high doses of stimulant medication, sufficient to cause the side effects that he had described. Psychological testing then revealed that Tyler had good learning abilities and no attention problems. Consequently, his medication was stopped. The assessment also showed that Tyler was highly focused on caring for his sisters, to a degree that made him anxious much of the time. Child protection officials were notified of the concerns for the younger children's well-being which including being left unattended and knocking on neighbours' doors asking for food. As a result, Tyler's sisters were placed in foster care and a full parenting capacity assessment was commenced for the mother.

The mental health team then made recommendations about the type of long-term foster home that could provide Tyler with the supports that he needed to thrive. A family stepped forward who was willing to make the commitment. The team supported Tyler and his foster family as he transitioned to his new home. Tyler also had regular visits with his sisters, although not with his mother, as she was unable to behave appropriately towards him. For example, she lashed out at him verbally, blaming him for 'causing problems' for the family. The team also advocated for Tyler's return to school with a plan to better meet his needs. He received extra help and soon proved very capable of focusing, increasingly so as his anxiety abated. But for Tyler, beyond the connections with his siblings, what was most meaningful was finally getting to play soccer. With encouragement from his foster parents, he rapidly improved and became a star on his school team. Importantly, Tyler was also able to express his remorse to the woman he had injured after she had recovered. Her gracious acceptance of his apology played an important role in helping him to thrive.

Tyler's case illustrates three important public mental health policy issues. First, unaddressed mental health conditions have a profound impact on individual children, as well as on the community. Second, crucial

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opportunities are missed when avoidable underlying social adversities are not addressed—in this case, family socio-economic disadvantage and child maltreatment. Third, addressing shortfalls in prevention and treatment services could greatly ameliorate not only the causes but also ensuing childhood mental disorders and their sequelae. We now discuss each of these public policy issues—or collective ethical challenges in ensuring children's mental health for the many.

Children's Mental Health for the Many

Addressing the High Prevalence and Impact of Childhood Mental Disorders

Perhaps the greatest challenge for *collective ethical decision-making* for *the many* involves the high prevalence and lifelong impact of childhood mental disorders. From both public health and child rights' perspectives, the goal is ensuring social and emotional well-being and healthy development for all children (UN, 1989; WHO, 2005). Yet many children experience mental disorders, making this goal difficult to achieve. These disorders cause severe symptoms that fall well beyond expected social and emotional norms and that interfere with child development and functioning at home, at school and in the community (American Psychiatric Association [APA], 2013; WHO, 2016). Most mental disorders also start in childhood—including anxiety, attention-deficit/hyperactivity disorder (ADHD), substance use disorders, conduct disorder, depression, autism spectrum disorder, bipolar disorder, eating disorders and schizophrenia—meaning that the burden in childhood is high (APA, 2013; WHO, 2016).

Recent meta-analyses of high-quality surveys conducted in representative population samples have confirmed that the prevalence of mental disorders in young people is very high globally. In fact, at any given time, approximately 13.4 per cent of children—or 241 million worldwide—are estimated to meet diagnostic thresholds, having both symptoms and impairment (with 95 per cent confidence intervals of 11.3–15.9; applying either North American or international classification systems, e.g. APA, 2013, or WHO, 2016) (Polanczyk *et al.*, 2015). The leading diagnostic groups included: anxiety (any disorder; 6.5 per cent; affecting an estimated 117 million children globally); disruptive behaviour disorders (any disorder; 5.7 per cent; affecting 113 million); ADHD (3.4 per cent; affecting 63 million); and depressive disorders (any disorder; 2.6 per cent; affecting 47 million) (Polanczyk *et al.*, 2015). Importantly, these estimates include only those with impairment, which is critical because impairment indicates children in need of treatment. Nevertheless, definitions of impairment varied substantially across the surveys, constituting a major source of variability in the estimates (Polanczyk *et al.*, 2015).

Notably, the childhood burden may be much higher than these rates depict because they exclude several rare yet debilitating diagnoses. These diagnoses include autism spectrum disorder, bipolar disorder, eating disorders and schizophrenia—as well as childhood substance use disorders, an increasing problem in many countries (Whiteford *et al.*, 2013; Waddell *et al.*, 2014). The numbers needing treatment may therefore greatly exceed 241 million worldwide. These rates also exclude children with symptoms that are below diagnostic thresholds, which can nevertheless still cause considerable distress and impairment (Polanczyk *et al.*, 2015). The rates furthermore do not account for the added burden of experiencing two or more concurrent disorders, a situation that may affect as many as 30 per cent of children who have mental disorders (Waddell *et al.*, 2014).

Adding substantially to the burden for individuals, most mental disorders begin early in the lifespan, then persist. Observational studies have shown that 50 per cent of mental disorders start before age 15 years and 74 per cent before age 18 years (Kim-Cohen *et al.*, 2003). Similarly, the median age of onset has been shown to be 11 years for some of the most common disorders, namely, anxiety and behavioural disorders (Kessler *et al.*, 2005). Most mental disorders then continue throughout adulthood—with not only concomitant ongoing distress and symptoms, but also adverse social outcomes including reduced educational and occupational opportunities (Fergusson *et al.*, 2005; Boyle and Georgiades, 2010). Adverse outcomes even include early mortality, with as many as 10–16 potential years of life lost for individuals with mental disorders compared with the general population (Jokela *et al.*, 2009; Lawrence *et al.*, 2013; Walker *et al.*, 2015; Hjorthøj *et al.*, 2017).

Beyond the impact on individuals, childhood mental disorders also take a heavy collective toll. In particular, these disorders are associated with substantial health-care, justice system, child welfare and special education costs, in addition to the costs of lost human potential (Cohen and Piquero, 2009). For example, it has been estimated that averting just one case of conduct disorder could save lifetime expenditures of $3.0–5.0 million (US currency, 2017 equivalency) (Cohen and Piquero, 2009). Beyond childhood, in Canada as an example, the

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economic burden associated with mental disorders in aggregate and the impact on quality-of-life, healthcare use and workplace productivity are estimated to exceed $49 billion annually (US currency, 2017 equivalency) (Lim *et al.*, 2008). Mental disorders in aggregate also account for 7.4 per cent of the global disease burden—more than HIV/AIDS, tuberculosis, diabetes or motor-vehicle accidents—and are the leading cause of years-lived-with-disability worldwide (Whiteford *et al.*, 2013). For children in particular, the burden associated with mental disorders now exceeds that associated with physical health problems such as obesity and asthma (Polanczyk *et al.*, 2015). In fact, for children, mental disorders are now estimated to be the leading cause of disability globally (Erskine *et al.*, 2015).

The first public health ethical challenge, then, involves addressing the high prevalence and high lifelong impact of childhood mental disorders. These disorders have a profound impact on affected individuals and now supersede other illnesses in terms of the long-term costs and the impact on populations.

Addressing the Avoidable Social Adversities that Underlie Many Childhood Mental Disorders

Beyond the high prevalence and impact of childhood mental disorders, addressing social determinants is yet another challenge for *collective ethical decision-making* for *the many*. Most mental disorders have their origins in early life, 'obliging' society to 'focus on risk processes occurring during childhood' (Kim-Cohen *et al.*, 2003: 215). It is also increasingly appreciated that 'mental health inequalities are strongly associated and embedded within the broader social and economic context' (Ngui *et al.*, 2010: 3). Building on this understanding, considerable evidence now suggests that serious childhood adversities such as family socio-economic disadvantage and child maltreatment likely play a causal role in the development of many mental disorders including substance misuse, behavioural problems, depression and posttraumatic stress (Power *et al.*, 2002; Dube *et al.*, 2003; Costello *et al.*, 2003; Gilbert *et al.*, 2009; Costello *et al.*, 2010; Kessler *et al.*, 2010; Norman *et al.*, 2012; Reiss, 2013). In parallel, evidence has also emerged highlighting the role of gene–environment interactions in the development of many common mental health problems. In particular, environmental stressors such as child maltreatment can influence gene expression, in turn leading to poor child mental health outcomes such as conduct disorder (Caspi *et al.*, 2002; Caspi *et al.*, 2003; Rutter *et al.*, 2006; Cicchetti *et al.*, 2011; Uher, 2014). In essence 'social environments and experiences get under the skin early in life'—thereby affecting health over the life course (Hertzman and Boyce, 2010: 330).

Strikingly, family socio-economic disadvantage and child maltreatment are both avoidable problems—pointing to the crux of this second public health ethical challenge. Many proposals have been made for ameliorating social gradients, including reinvigorating redistributive social policy approaches (Daly and Cobb, 1989; Marmot *et al.*, 2010; Wilkinson and Pickett, 2010; Hertzman and Boyce, 2010; Banting and Myles, 2013). Yet social gradients continue to worsen globally (Marmot and Allen, 2014; International Social Science Council *et al.*, 2016). There is also considerable evidence that child maltreatment can be prevented or greatly reduced, for example, through programmes that provide intensive supports to disadvantaged parents—improving child development and mental health outcomes, while simultaneously improving parents' lives (Olds, 2008; Mikton and Butchart, 2009; MacMillan *et al.*, 2009). Yet such programmes have yet to become widespread, and child maltreatment remains a serious public health problem in most countries (Gilbert *et al.*, 2009; Reading *et al.*, 2009; Moreno, 2017). As a result, many children continue to experience these avoidable causes and consequences of mental disorders (Waddell *et al.*, 2008).

This failure to address avoidable adversities also constitutes a violation of children's rights to have their basic needs met (UN, 1989). These rights violations are even more concerning in cases of extreme adversity. Many indigenous children, for example, are coping with the harsh intergenerational effects of colonialism—including the long-term sequelae of the forced removal of children from their families and placement in residential schools, and continuing exposure to marked socio-economic marginalization as well as racism (Adelson, 2005; Reading, 2015; Truth and Reconciliation Commission of Canada, 2015; Priest *et al.*, 2013). Extreme adversities for children living in low-income countries, meanwhile, frequently include: displacement and forced migration as a result of war; use as labourers, soldiers and prostitutes; loss of parents and families due to epidemics such as HIV/AIDS; ongoing exposure to family and community violence; and child marriage and pregnancy (Belfer, 2008; Ngui *et al.*, 2010; Kieling *et al.*, 2011; Fazel *et al.*, 2012).

This second public health ethical challenge therefore involves addressing the fact that many children are exposed to serious but avoidable adversities—including

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the extreme adversities faced by many in low-income settings. These experiences not only contribute to the development of some of the most common mental disorders but also constitute violation of children's rights.

Addressing Stark Shortfalls in Prevention and Treatment Services for Children

The third challenge for *collective ethical decision-making* for *the many* involves stark service shortfalls. Even in high-income jurisdictions such as the UK and the USA, data suggest that as many as 70 per cent of young people with mental disorders cannot access needed specialized treatment services (Waddell *et al.*, 2014). This situation persists despite ample evidence on effective treatments for most childhood mental disorders (Weisz *et al.*, 2013). As a consequence of these shortfalls, in countries such as Canada, desperate families have even pursued court challenges to force policymakers to fund more services nationwide (Shepherd and Waddell, 2015). Yet, many families are not in a position to advocate, suggesting that advocacy should not solely depend on parents (Waddell *et al.*, 2005a). Similarly, prevention programmes still remain largely unavailable, despite strong evidence of their effectiveness and cost-effectiveness (Nores *et al.*, 2005; Waddell *et al.*, 2007a; Lee *et al.*, 2008; Moreno, 2017). These service shortfalls continue, furthermore, despite substantial health expenditures growing steadily year-by-year in many wealthy countries (Office for National Statistics, 2015; Martin *et al.*, 2016; Canadian Institute for Health Information [CIHI], 2016). Yet some high-income countries are doing better than this. Australia, for example, has doubled the proportion of children with mental disorders who are able to access appropriate services—from one-third in 1998 to two-thirds in 2014—with changes attributed to significant new national prevention and treatment investments (Lawrence *et al.*, 2015). Other high-income countries should follow suit.

Globally, however, the situation is significantly worse. It has long been recognized that commitments to children's mental health must begin with the development of public policies that address mental health service provision, as well as child protection, primary healthcare, education and social welfare services (Shatkin and Belfer, 2004). Yet few low-income countries have prepared such policies and overall mental health service shortfalls remain as high as 90 per cent in these countries—with even higher shortfalls for children (Whiteford *et al.*, 2013). Because mental disorders start in childhood, and because the populations of low-income countries are disproportionately younger, demographically, assisting these countries to address children's mental health has been deemed a global public policy priority (Kieling *et al.*, 2011). Yet many low-income countries have yet to even designate government entities to hold responsibility for children's mental health and have yet to allocate specific funding for this issue—likely because resources are scarce and because international aid organizations also fail to prioritize children's mental health (Kieling *et al.*, 2011). The World Health Organization has long been trying to address the mental health gaps, most recently with action plans that make use of global-burden-of-disease data to track progress towards meeting policy and programme development goals (WHO, 2015). Yet in recent global reports, children have only been minimally featured (WHO, 2015). Stark global inequalities also persist in the resources available for mental healthcare, regardless of age—with funding ranging from less than $2 per capita in low-income countries to over $50 in high-income countries (US currency, 2017 equivalency) (WHO, 2015). Stark resource shortfalls are therefore a crucial underlying issue in poorer countries.

Amid the missed prevention and treatment opportunities, one approach nevertheless appears to be thriving in high-income countries—the use of pharmacological treatments. Such prescriptions have increased approximately two-fold in the UK and three- to four-fold in Canada in recent decades, particularly for anti-psychotics (intended for use in treating psychotic disorders such as schizophrenia) but also for medications such as stimulants (used to treat ADHD) (Rani *et al.*, 2008; Alessi-Severini *et al.*, 2012; Ronsley *et al.*, 2013; Hauck *et al.*, 2017). This increased prescribing is occurring despite prevalence staying relatively stable for all the childhood mental disorders, including psychotic disorders, suggesting that many children are receiving these medications 'off label' and needlessly or inappropriately (Waddell *et al.*, 2014; Polanczyk *et al.*, 2015). In the case of anti-psychotics, notably, prescriptions are also increasing despite these medications causing serious side effects (Ilies *et al.*, 2017). At the same time, safe and effective psychosocial interventions such as parent training and cognitive-behavioural therapy remain relatively unavailable (Weisz *et al.*, 2013; Waddell *et al.*, 2014).

The third public health ethical challenge therefore involves addressing the stark children's mental health service shortfalls, including the provision of inappropriate treatments. These shortfalls also constitute a further violation of children's rights to have their basic needs met (UN, 1989).

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Opportunities for Progress

What are the opportunities for progress regarding these three public health ethical challenges? Furthermore, what are the opportunities for making children's mental health a public policy priority, thereby also better addressing children's rights? We believe that progress must begin with the recognition that mental health starts in childhood—for individuals and for populations. Waiting until adulthood to intervene has not sufficed and will not suffice (Heckman, 2006). The high prevalence and impact of childhood mental disorders must also be recognized as a matter of children's rights. Recognition for these two important precepts is the first step in addressing the shifts and the increases in public spending that are needed, and in beginning to reduce the enormous associated human suffering and collective costs.

Along with recognizing that mental health starts in childhood and recognizing children's rights, we believe that there needs to be greater recognition, and consequently greater action, regarding the causal risk factors that are amenable to early interventions—particularly family socio-economic disadvantage and child maltreatment. If we addressed these two issues, many cases of mental disorders could be prevented and many more children could flourish. In addition, there are societal benefits when mental disorders are prevented, as shown by estimates of reduced public expenditures of a magnitude that could be sufficient to fund many new prevention programmes (Cohen and Piquero, 2009). But beyond this, providing safe and nurturing living conditions for all children is fundamental to the collective goal that most countries in the world have committed to—meeting all children's basic needs (UN, 1989; Marmot *et al.*, 2010).

As well, we believe that mental health itself needs to be fully recognized as crucial to health, particularly for children. Basic equity ideals are not being met when childhood physical healthcare is provided to all in need, at least in most wealthy countries, but mental healthcare is not. To attain equity, if an estimated 70 per cent of children with mental disorders are not receiving treatment currently, then treatment funding needs to triple, at a minimum, so that all children are reached (Waddell *et al.*, 2014). Wealthy countries have the resources to achieve this, as current health spending indicates (CIHI, 2016). The Australian example also shows that new public investments of this magnitude are indeed feasible (Lawrence *et al.*, 2015). Even greater resources are needed to address inequities in low-income countries, which wealthy countries could also assist with (Whiteford *et al.*, 2013). Coupled with this, prevention programmes need to be funded such that they are available to all children at risk. Ensuring intervention effectiveness is also fundamental. It is unacceptable, for example, that children are receiving inappropriate treatments while so many effective (prevention and treatment) interventions remain unavailable.

To make progress, who should do what? Children's mental health needs strong advocacy. But children cannot and should not be the ones to do this. Families have acted successfully as advocates in some cases, but often at great personal cost (Shepherd and Waddell, 2015). So families also should not have to assume this burden. Instead researchers, policymakers, practitioners and advocacy groups are the ones to step in (Waddell *et al.*, 2005a, 2007b). Many researchers have long recognized the need for early childhood interventions (Heckman, 2006; Belfer, 2008; Hertzman and Boyce, 2010; Marmot *et al.*, 2010). Policymakers, practitioners and advocacy groups can also take the lead so that more countries can begin to re-proportion public spending and policy priorities to better support children—and so that wealthier countries can share resources with those who have less. Considering their critical role as purveyors of ideas in democracies, journalists working in reputable news media organizations can also contribute to raising awareness of children's issues, as many already do (Waddell *et al.*, 2005b).

There is a collective duty of care that all citizens share, for all children (UN, 1989). For children's mental health, high disorder prevalence coupled with inattention to avoidable causal adversities and inadequate prevention and treatment services equates to a failure to meet this duty of care. We have outlined three central public health ethical challenges. Can progress be made? There is reason for hopefulness. Previous children's mental health examples suggest that when researchers, policymakers, practitioners, advocacy groups and journalists do join forces, the public impact can be powerful (Waddell *et al.*, 2005a, b, 2007b; Shepherd and Waddell 2015). Yet in the end, to fully address these challenges, public mental health ethics needs to be framed as starting with children's mental health. Mental health also needs to be framed as a basic need, integral to all children's rights and flourishing—for the one and for the many.

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