Mental health, NCDs and the post-2015 development goals

A focus on children and adolescents in low- and middle-income countries

Kate Armstrong and Susan Henshall

Background and rationale

In 2011, a high level meeting convened by the UN General Assembly agreed on a Political Declaration that acknowledged mental and neurological disorders are an important cause of morbidity, and a core component of the global rise in non-communicable diseases (NCDs). The recent draft World Health Organization (WHO) Comprehensive Mental Health Action Plan (MHAP) 2013–2020 (11 January 2013 version) responds to the call for greater recognition of the social, economic and human rights consequences of mental disorders, and provides a platform for ensuring that mental health is inclusive and accessible to all with disabilities.

These human rights protections provide an element of accountability to governments to ensure that these rights are being progressively realised, and that legislation to protect these people is implemented. However, contrary to this, young people living with mental illness are often subjected to stigma and discrimination and excluded from education, employment and income-generating opportunities as well as access to essential health and social services (WHO, 2010; Task Team of the Global Thematic Consultation on Health, January 2013). This problem is compounded by the fact that in the developing world, only 36 per cent of people living in low-income countries are covered by mental health legislation, compared to 92 per cent of people in high-income countries (WHO, 2013). Therefore, the implementation of dedicated mental health legislation is needed to help legally reinforce policies and plans in line with international human rights and practice standards.

Considered within the post-2015 development agenda (WHO, 2013). Specifically, the draft MHAP calls for a life-course and rights-based (see Box 1), multi-sectoral and evidence-focused approach that promotes universal access and coverage, and empowers those living with mental health disorders and psychosocial disabilities. In addition, it sets out a broad set of objectives and targets that offer a framework for action across all age groups (see Table 1).

The integration of a life-course approach within the draft WHO MHAP is particularly relevant given that the global mental health burden has shifted to younger ages and because most mental health disorders first manifest themselves during adolescence. From 1990 to 2010, the proportion of global burden measured in disability-adjusted life years (DALYs) increased for children and youth for such conditions as unipolar depressive disorders, anxiety disorders and drug use disorders – particularly for those aged 10 to 24 years (Gore, Bloem, Patton et al., 2011). Almost 20 per cent of adolescents in any given year experience a mental health problem, most commonly depression or anxiety, and in many settings, suicide is among the leading causes of death among young people aged 10–19 years. Furthermore, numerous other cases of mental health disorders originating during adolescence are left undiagnosed until later in life (Raphael, 2000; Prince, Patel, Saizena et al., 2007; Patel, Fisher, Hetrick and McGorry, 2007).

In children, the incidence of mental health conditions and disabilities has largely gone unrecognised. It has been estimated that one in 20 children in low- and middle-income countries (LMICs) has a severe mental disorder (Grantham-McGregor, Cheung, Cueto et al., 2007). Children and adolescents living with severe mental health disorders have been widely neglected by policy-makers and public health experts, particularly in LMICs where the overwhelming majority go undiagnosed and receive no treatment (WHO, 2009). Given the enormity of this unmet need, identifying and acting on the strategic links between the global action plans for mental health and NCDs, as well as those on the social determinants of health, alcohol and health workers, will be necessary to implement a comprehensive, co-ordinated response from health and social sectors at the country level.

Integrating mental health and NCDs across the life-course

All chronic health conditions of childhood have an enormous impact on mental health and well-being – not just of the patient...
but also their families and caregivers – yet the full impact of this phenomena in LMICs is largely ignored (see Box 2). Moreover, mental health disorders are increasingly being accepted as part of the broader NCD discourse, not just as chronic health conditions in and of themselves, but also as precursors to other NCDs. For instance, poor mental health in adolescence is strongly related to a range of other negative health and developmental outcomes, including lower educational achievements, substance misuse, violence and poor reproductive health, many of which in turn give rise to NCDs later in life.

As a result, health systems responses must recognise the underlying complexities and connections between NCDs and mental health conditions across the life-course, with policy-makers committed to redressing global inequities relating to child and adolescent mental health. The post-2015 development agenda – and, more specifically, future NCD and mental health action plans – must deliberately integrate objectives and targets that address the special needs of children and adolescents within a framework for sustainable human development. The ongoing global thematic consultation for health supports both maximising healthy life expectancy and universal health coverage (UHC) as broad overarching goals, and there is a case for including child and adolescent mental health under both (WHO, 2012; Task Team of the Global Thematic Consultation on Health, January 2013).

**Prevention strategies for mental health and other NCDs**

For many mental health conditions and other NCDs, failing to focus on primary, secondary and tertiary prevention during the ‘golden window’ of opportunity that childhood and adolescence offers can have lifelong consequences. It is therefore essential that greater emphasis be placed on developing and strengthening proven cost-effective preventive strategies that will promote child and adolescent mental health. Particular attention is needed in LMICs where the majority of the world’s young people live.

Mainstreaming child and adolescent mental health within existing platforms offers relevant opportunities. For example, iodisation of salt and newborn screening of babies for congenital hypothyroidism at a population-wide level would facilitate the prevention of profound developmental delay in cost-effective and sustainable ways. Likewise, a recent population-based study of over 85,000 children found that prenatal folic acid supplementation around the time of conception could lower the risk of autism (Surén, Roth, Bresnahan et al., 2013), offering potential public health benefits beyond the prevention of spina bifida.

More broadly, there is a growing body of research to support a strong relationship between NCD risk factors and mental health, with physical activity shown to prevent or reduce symptoms of depression and anxiety. A review of 37 studies published between 1970 and 2000 found that reduced symptoms of depression were strongly linked with greater amounts of occupational and leisure time physical activity (Dunn, Trivedi and O’Neil, 2001). Conversely, some studies have shown depression, particularly among children and adolescents, to be a potential barrier for engaging in physical activity (Sallis, Prochaska and Taylor, 2000). Other studies have found self-efficacy and friend support (both of which can be thought of as contributing to positive overall well-being) as positively associated with physical activity (Van Der Horst, Paw, Twisk and Van Mechelen, 2007). Thus, not only can physical activity play a constructive role in contributing to mental health and well-being, but also these same factors often influence whether a child or adolescent participates in physical activity in the first place.

Obesity is another factor influencing child and adolescent psychological and emotional well-being (Russell-Mayhew, McVey, Bardick and Ireland, 2012). Depression and anxiety can be both a cause and consequence of obesity, and weight-based peer victimisation has been linked to suicide attempts (see Box 3). Unhealthy foods and beverages are commonly advertised to children and adolescents, particularly in emerging economies. Many large food and beverage companies have pledged to restrict

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**Box 2 Impact of heart disease**

Rheumatic heart disease (RHD) is a disease with communicable and non-communicable antecedents and almost exclusively affects the poor. The physical and psychosocial burden of undiagnosed and untreated RHD on children, families and even health professionals presents huge challenges for under-resourced health systems. It is estimated that RHD affects more than 30 million people worldwide and kills more than 200,000 children each year. Furthermore, studies have shown that:

- quality of life among parents of children with heart disease is significantly reduced (Arafa, Zaheer, El-Dowaty, Moneeb et al., 2008);
- children living with RHD demonstrate lower quality of life scores in areas of family cohesion and social, emotional and behavioural concepts; and
- families from lower socio-economic environments are most affected by severe disease and the psychosocial aspects of living with RHD (Carvalho, Bloch and Oliveira, 2009).

Experts recommend a comprehensive national prevention strategy to reduce national inequities, and a collaborative approach to international efforts to reduce the global burden of RHD, such as demonstrated in Cuba, Martinique and Guadeloupe (Nordet, Lopez, Duenas and Sarmiento, 2008). Future success will depend upon mental health and NCD action plans that humanely address ways to reduce the suffering of those already affected by end-stage disease in LMICs. Effective palliative care for children and adolescents in resource-poor settings is an issue relevant across a range of NCDs, not just RHD.

**Open Heart**

Open Heart is an Academy Award-nominated documentary outlining the plight of children in Rwanda with RHD who are forced to leave their families and travel to Sudan for life-saving cardiac surgery (http://openheartfilm.com/). The film dramatically highlights the impact of untreated RHD on the mental health and well-being of children, adolescents, families and their treating doctors. At the recent 6th World Congress on Paediatric Cardiology and Cardiac Surgery in South Africa, doctors from Africa and the Asia-Pacific region expressed helplessness, frustration, anger and despair at their inability to cope with the overwhelming numbers of children who are presenting to their clinics with end-stage heart failure caused by untreated and late-diagnosed RHD.
advertising to children, although there are questions as to the effectiveness of voluntary restrictions (Moodie, Stuckler, Monteiro et al., 2013). A strong evidence base supports the case for public regulation and market intervention, and governments should be encouraged to implement legislative measures that prevent advertising and promotion of unhealthy foods and beverages to children and adolescents. Likewise, efforts to reduce the harmful use of alcohol across the life-course will have a clear impact on mental health at a population level (see Box 4).

Developing multi-sectoral partnerships

Mental health is not just a health issue. There is compelling evidence that as for all NCDs, the determinants of health – including poverty, lack of education and poor housing – significantly affect mental health status among young people. The failure to address mental health results in wide-ranging consequences for economic and social development (Fisher and Brown, 2010; WHO, 2010). Consequently, a multi-sectoral approach is needed that aims to improve access to health services while also strengthening links with education, employment, housing, criminal justice and social protection sectors to meet the multiple needs of young people with mental health conditions. Robust data to inform evidence-based recommendations for policymakers on the most cost-effective and sustainable strategies to implement will be essential.

Box 3 Leading cause of death

Youth suicide prevention in New Zealand

Globally, suicide is the second leading cause of death among 10–24-year-olds; young people are now the group at highest risk in a third of countries, in both developed and developing nations. The majority of these young people committing suicide or attempting suicide have a recognisable mental health condition.

New Zealand was one of the first countries to develop a comprehensive national suicide prevention strategy (Associate Minister of Health, 2006). New Zealand’s rates of youth suicide are high – suicide is the second most common cause of death in young people aged 15–24, and hospitalisation for suicide attempts is most prevalent in this age group. In response to the increasing suicide rates among young people, in 1998 the New Zealand Government launched a comprehensive interagency youth suicide prevention strategy. Developed by the ministries of Youth Affairs, Health and Te Puni Kōkiri, the strategy consisted of two parts: ‘In Our Hands’ (which focused on all youth) and Kia Pikite Ora o Te Taitamaki (which used a Māori framework to address suicidal behaviour among Māori). Acknowledging the complex nature of the factors that lead to suicidal behaviour, the strategy was designed to help all sectors of society act together to reduce youth suicide and suicidal behaviour by reaching beyond health to the ministries of Education, Social Services, Work and Income, Māori Affairs; Youth Affairs; Corrections and Police; and Internal Affairs. The national suicide prevention strategy has now evolved to an all-age approach and continues to be co-ordinated across government agencies and integrated across the public and private sectors.

Box 4 Foetal alcohol disorders

Foetal alcohol spectrum disorder (FASD) refers to a range of conditions caused by prenatal exposure to alcohol. The majority of children with FASD will have developmental disorders as a result of impaired brain development, including developmental delay, low IQ and learning disabilities. The effects of foetal alcohol exposure are lifelong, and in later life FASD can be associated with reduced social and economic participation (ANPHA, January 2012). FASD is 100 per cent preventable if women do not drink alcohol during pregnancy.

FASD is the leading preventable cause of non-genetic, developmental disability in Australia. It is found across the Australian community and is often concentrated in families and communities living with other health, economic and social challenges, with some studies showing a higher incidence in rural and remote communities (ANPHA, January 2012). The true rates of FASD in Australia are still unknown. In November 2012, an Australian Government report, ‘FASD: The Hidden Harm’, recommended a number of measures to improve prevention, diagnosis and management of FASD, including independent studies into the marketing of alcohol to young people, and into the pricing and availability of alcohol in Australia. The report also included FASD in the List of Recognised Disabilities.

There are no reliable global prevalence figures for FASD, but an estimate of the global incidence is approximately 0.97 per 1,000 live births. In comparison, researchers estimate that for every 1,000 babies born in South Africa’s Western Cape, between 70 and 80 have the syndrome – the highest known incidence in the world (October, 2011).
Child and adolescent mental health in the post-2015 development agenda

Global advocacy efforts to elevate the rights and needs of children, adolescents and youth who are living with or at risk of developing NCDs have involved specific efforts to ensure that young people are not forgotten in the process of setting priority actions for national and global NCD prevention and control. These sustained efforts have resulted in a greater emphasis within the Global Action Plan for NCDs on child and adolescent health. The challenge now is to ensure that global health advocates dedicate the same heightened level of attention to the development of child and adolescent-focused targets for mental health prevention and treatment, particularly as the process for MHAP is concomitant with discussions for setting goals for health in the post-2015 agenda. The opportunity to set global mental health targets for children and adolescents that could be both part of a revised MHAP and integrated within the next generation of global development goals should not be missed.

With the process of getting the post-2015 agenda under way, agreement on equitable, holistic and people-centred goals should inform targets and indicators relating to mental health as follows:

- **Equitable access** to quality health services (including palliative care), as well as education, employment and sexual and reproductive health care is essential. The acceptance of universal health care (UHC) as a core principle provides the foundation for setting indicators that would measure increased coverage of mental health services for children and adolescents, including primary and secondary prevention and care approaches. For example: newborn screening; improved access to quality, affordable and essential psychotropic, NCD and pain medicines; a reduction in out-of-pocket expenses incurred by families accessing mental health services; and increasing the number of mental and other health professionals with the skills and resources to care for young people (WHO, 2012; WHO/UNICEF, 2013). While UHC will be an essential component of addressing the treatment and service gap, additional targets should be set to address the broader social determinants of health relevant to young people living with or at risk of mental health conditions.

- **Inclusion and mainstreaming** of child and adolescent mental health and NCD interventions into other priority programmes and partnerships is recommended. Robust data and evidence will be required, but should not impede implementation of strategies proven to be effective in similar settings. The report of the global consultation on health recommends a hierarchy of goals under ‘maximising health life expectancy’ that supports measurement of modifiable risk factors in young people (such as harmful use of alcohol; physical inactivity and unhealthy diets; and marketing of unhealthy foods and beverages to children) as had been previously proposed for monitoring NCD prevention and control.

- **Meaningful involvement of youth** has been increasingly recognised within global development. In 2003, the UN General Assembly passed Resolution 58/133 ‘Policies and Programmes Involving Youth’, which states that the participation of young people is an asset and a prerequisite for sustainable economic growth and social development. For young people living with mental health conditions and other NCDs, meaningful inclusion in decision-making processes and protection of their civil and political rights should be formally recognised and monitored within the frameworks of the MHAP and the post-2015 agenda.

### Conclusion

At this year’s World Health Assembly, member states will consider the final draft of the Mental Health Action Plan (MHAP). Governments and policy-makers should be encouraged to seek agreement on targets that comprehensively reflect the cross-cutting principles of the WHO MHAP and establish a strong base for future action within the post-2015 global development goals to address mental health and other NCDs for children and adolescents living in LMICs. Civil society and NGOs, the private sector, and academic and research institutions need to be ready to exchange knowledge with governments and policy-makers on specific, evidence-based actions that can address mental health and other NCDs across the life-course, and actively support comprehensive and co-ordinated whole-of-government responses at national and international levels.

*Health is a beneficiary of development, a contributor to development across a broad spectrum of sectors and priorities, and a key indicator of what people-centred, rights-based, equitable, and sustainable development seeks to achieve.*

(Draft report of the Global Thematic Consultation on Health)
Table 1

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<th>WHO draft Mental Health Action Plan (MHAP) 2013–2020: Objectives and targets</th>
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<td><strong>Key objectives</strong></td>
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<td><strong>Proposed global targets</strong></td>
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<td>To strengthen effective leadership and governance for mental health</td>
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<td>To provide comprehensive, integrated and responsive mental health and social care services in community-based settings</td>
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<td>To implement strategies for promotion and prevention in mental health</td>
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Endnotes

1 With contributions from members of the broader NCD Child Coalition.

2 Mental health is defined by WHO as a state of well-being in which the individual realises his or her own abilities, can cope fruitfully, and is able to make a contribution to his or her community.

References


Austria National Preventive Health Agency (ANPHA) (January 2012). *The House of Representatives Standing Committee on Social Policy and Legal Affairs, Inquiry into Foetal Alcohol Spectrum Disorder (FASD)*.


Dr Kate Armstrong (NCD Child Network) is the President and Founder of CLAN (Caring and Living as Neighbours), a charitable organisation that focuses on improving health outcomes for children living with CAH (Congenital Adrenal Hyperplasia). In early 2011, CLAN was appointed Chair of the Child-focused Working Group of the NCD Alliance, and later project managed the development of the network (see www.ncdchild.org). Dr Armstrong also currently works as a GP in Sydney, Australia.

Dr Susan Henshall is an adviser to NCD Child and has previously served as Advocacy Director at the Union for International Cancer Control (UICC). Prior to this, Dr Henshall worked at the Kinghorn Cancer Centre, Garvan Institute of Medical Research, as Head of Prostate Cancer Research and then Manager of Strategy and Policy. She has a PhD in Virology (University of Adelaide) and a Masters in International Health (University of New South Wales), and in 2010 was part of the Health Leaders Programme at the Judge Business School, Cambridge (UK).


