Maternal, child and adolescent mental health: An ecological life course perspective

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Mental health is about how we feel, think and behave, and our ability to function in our daily lives. Like our physical health, mental health is essential to our well-being. Mental health problems can affect anyone, but circumstances such as poverty and inequality, intractable violence and a lack of access to suitable services can intensify these problems. Yet, the mental health needs of children and adolescents have tended to be neglected, especially in low-income and middle-income countries.[1]

South Africa has one of the highest violent crime rates in the world, ranking 8th out of 230 countries for homicide alone.[2] By the end of grade four (age 11), 78 percent of South African children cannot read for meaning.[3] At first these two statistics may appear only tangentially related, yet the relationship between them is strong. They illustrate one of the challenges of investing in South African public health in general, and in mental health and violence prevention in particular, as the link between causes and consequences doesn't always follow a neat linear chain. The pathways from an insult in early childhood to adult homicide, or from struggling to read to dropping out of school and developing a mental health condition are often long and complicated. Therefore, interventions must span the life course, and interrupt risks and promote flourishing at every possible point in time.

In this chapter, we illustrate two interrelated points, which, taken together, make a concrete case for greater investment in child development, maternal health, community development and policy – investment not simply in child mental health, but for child mental health.

1. In order to reduce the burden of mental health conditions, substance abuse, and violence, we need to intervene, universally, early in the life course, and in so doing reduce the number of individuals who require later, intensive intervention; and
2. Investment in mental health cannot simply focus on psychosocial programs: it must extend into schools, communities, the economy, and beyond.

What is the burden of mental health conditions across the life course in South Africa?

Mental health problems exist along a continuum from mild, time-limited distress to chronic, progressive, and severely disabling mental health conditions.[4] The term mental health conditions is used to describe conditions – like depression, anxiety, or post-traumatic stress – which severely impact on an individual's capacity to function.

Nearly one in three South Africans will suffer from a mental health condition in their lifetime.[5] The South African Stress and Health Survey showed that, for lifetime prevalence, the most prevalent mental health conditions were anxiety disorders (15.8%), followed by substance use disorders (13.3%) and mood disorders (like depression and bipolar disorder) (9.8%).[6] The economic cost of mental health conditions is rising: mental health spending by individuals[i] in South Africa has increased by more than 80% in the past five years, reaching R2 billion in 2016 according to one private insurer.[7] This figure only represents a small proportion of South Africans' spending on mental health.

It is estimated that mental health problems affect 10 – 20% of children and adolescents in low-income and middle-income countries.[8] This is similar to the estimates for high-income countries. There are no national estimates of the prevalence of child and adolescent mental health problems in South Africa, but estimates for the Western Cape suggest that 17% of children in the province have a diagnosable mental health condition.[9]

More research is needed to fully understand the size of the mental health burden for children and adolescents in

i Not to be confused with government spending

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South Africa. But there is substantial evidence of the ways in which social and economic factors – such as poverty, illness and violence – influence and exacerbate mental health outcomes.[10] Given the high levels of adversity facing children and adolescents in South Africa, more attention needs to be paid to meeting the mental health needs of this age group. These investments must start early on, and continue into adolescence and adulthood, to avoid the risk of the gains made being lost.

There are clear age-related patterns in mental health morbidity: different mental health conditions typically emerge at particular time points, and early development trauma increases the risk of subsequent mental health conditions.[11] Figure 38 illustrates how rates of self-harm peak in adolescence, and mental and substance use disorders are most prevalent in young adulthood (around age 25). In South Africa, the National Youth Risk Behaviour Survey, last administered in 2011, showed that 24.7% of learners had felt so sad or hopeless during the past six months that they stopped doing some usual activities for two or more weeks in a row. The prevalence of sad and hopeless feelings among learners increased with age.[12]

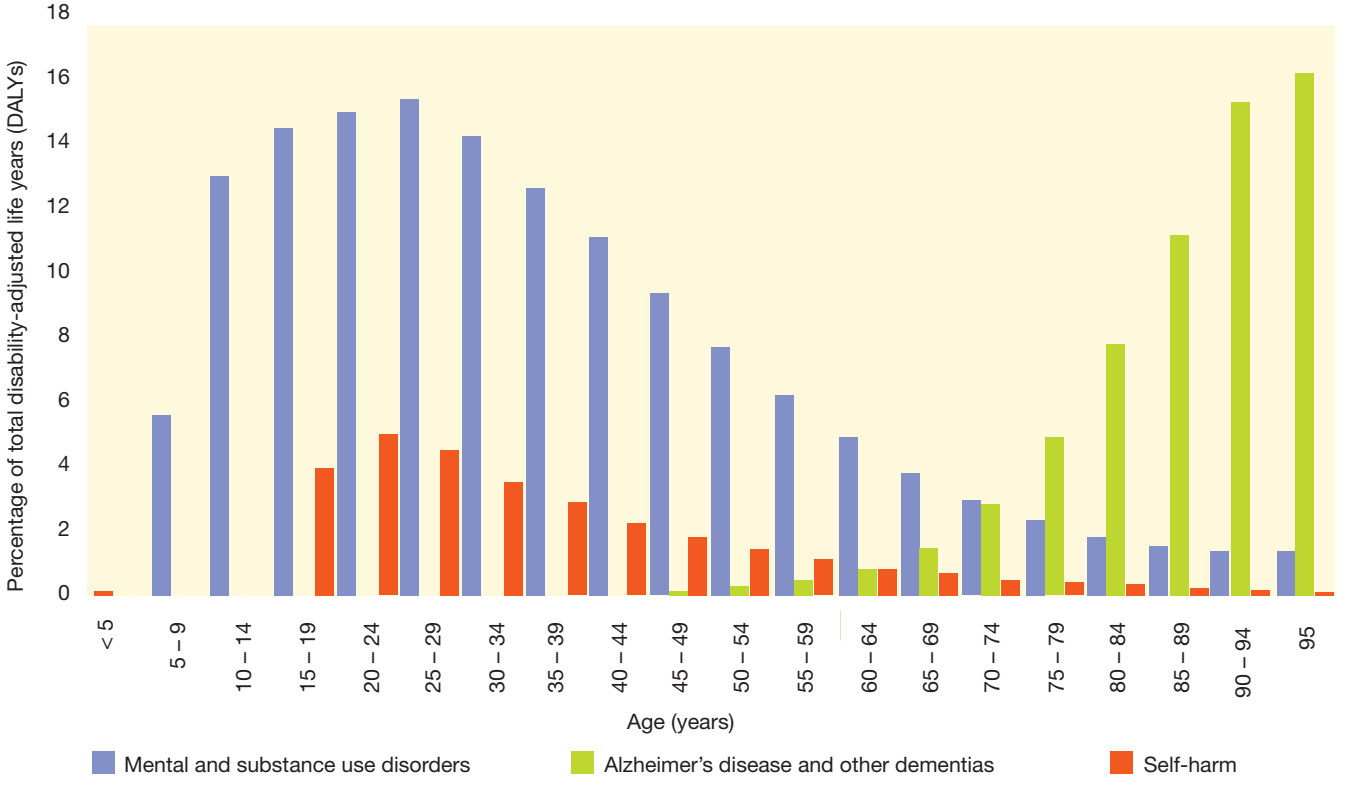
There are at least three arguments for an increased focus on – and investment in – child and adolescent mental health and well-being. First, there is an obligation to promote the wellbeing and optimal development of children and adolescents. Second, a substantial proportion of adult mental health conditions have their origins in childhood so by intervening early we can help reduce their chances of developing mental health problems in adulthood. Third, we have the potential to break the intergenerational cycle and reduce the burden of mental health problems in future generations.

Yet, there is a substantial gap in terms of services for children and adolescents in South Africa.[13] Despite epidemiological data suggesting a high burden of mental health conditions among youth, only 6.8% of mental health inpatient admissions and 5.8% of outpatient visits were for patients below 18 years; and only three provinces reported the existence of any public-sector child psychiatrists. Despite efforts to cost mental health promotion and prevention campaigns for children and adolescents subsidised by the Department of Health, none could be identified.[14]

Why is it essential to adopt a life course approach?

In the introduction we noted two figures related to violence and education. At this point, it is worth exploring the

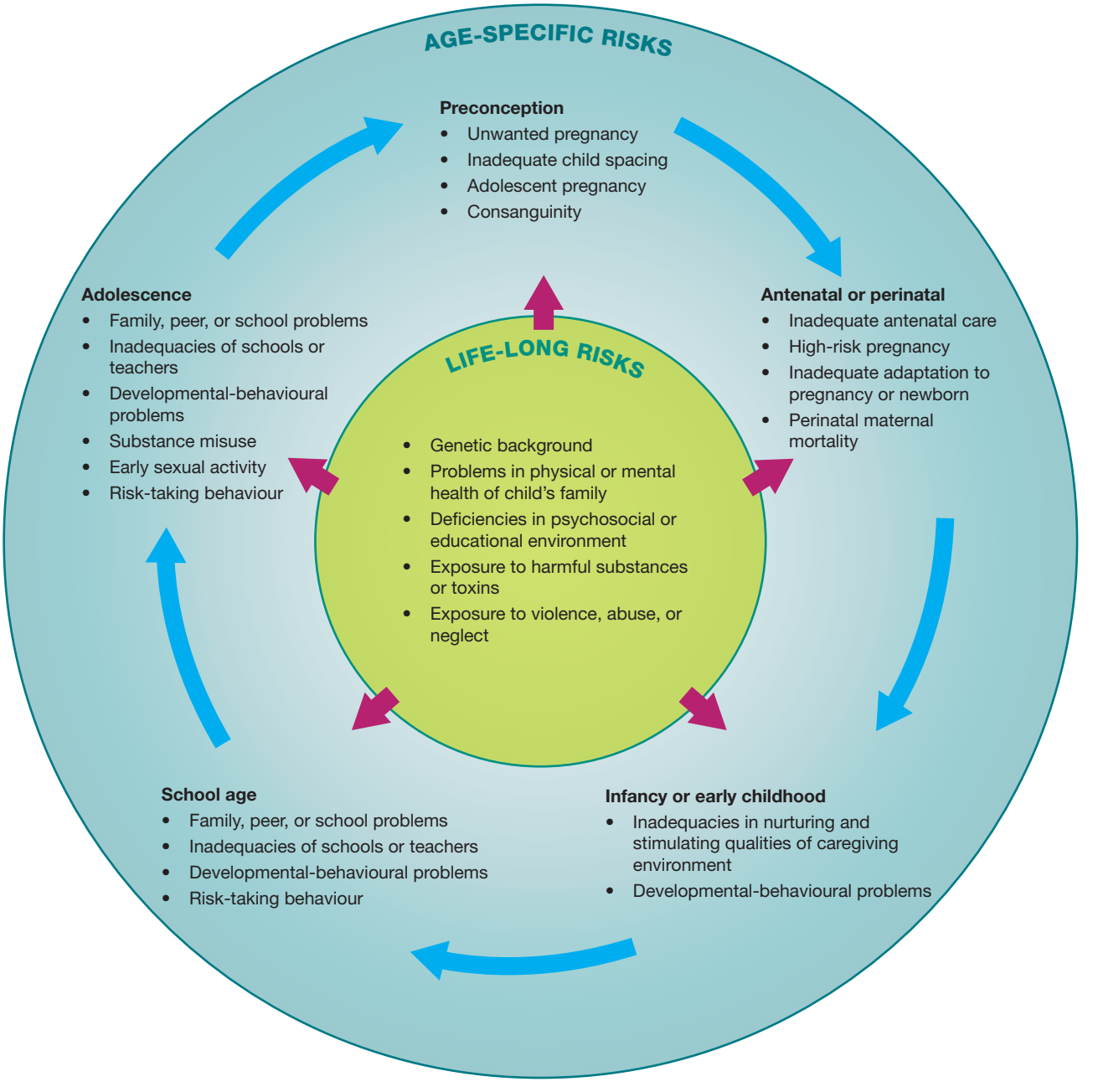
Figure 38: The global burden of mental health conditions across the life course



Source: Global Burden of Disease health data (2016) Reproduced with permission from: Patel V, Saxena S, Lund C, et al (2018) The Lancet Commission on Global Mental Health and Sustainable Development. *The Lancet*, 392: 1553-1598.

relationship between these statistics. When young children are exposed to violence in the home, they are more likely to struggle at school; their attention spans may be affected, and they may experience difficulties in emotion and cognition which hamper learning.[15] If, in this scenario, they are exposed to domestic violence perpetrated against their mothers, then it is likely that their caregivers are stressed and possibly depressed, due to their own experiences of victimisation.[16] Linked to this we know that low educational attainment and maternal depression pose risks to child development.[17] When these children reach adolescence, they are more likely to be frustrated at school, and fall increasingly behind with their school work, and come into increasing conflict with their teachers, which in turn undermines their academic performance.[18] In most poorly resourced schools, teachers are not able to refer children to specialised counsellors as none exist. Instead, children may be harshly punished, or sent out of the classroom to sit in the playground. This increases the risk of aggressive, impulsive or disruptive behaviour and the child or adolescent is increasingly likely to drop out of school.[19] School dropout, in turn, increases risk for gang involvement and substance use.[20]

Figure 39: Risk factors for mental health conditions across the life course



Source: Kieling C, Baker-Henningham H, Belfer M, Conti G, Ertem I, Omigbodun O, et al. (2011) Child and adolescent mental health worldwide: Evidence for action. *The Lancet*, 378(9801): 1515-1525.

Figure 39 (above) and Table 21 (below) outline some of the key risks and important protective factors for child development and mental health which come into focus at different points in the life course – and which may exacerbate existing life-long risks. Although some factors may be more salient at certain periods of development (for example, the impacts of maternal depression or anxiety might be most harmful to an infant), their effects on subsequent development may endure. It is therefore vital to strengthen protective factors and minimise risks during each phase of development in order to reap benefits later on.

Emerging evidence from developmental psychology, genetics, biology, and neurology helps us to understand how risk is conferred – or individuals develop resilience – over time. Developmental cascades, cumulative risk and embedding are concepts from this work which are useful ways to think about the origins of mental health conditions.[21]

Biological embedding refers to the way in which children's early environments influence their biology. This process of adaptation is referred to as embedding – or "the environment getting under the skin"[22] and causing biological changes which result in different patterns of development across the life course.[23] For example, exposure to violence early in life causes changes in physiology that may make a person more susceptible to substance abuse or mood disorders.

Cumulative risk also describes a mechanism by which the social environment in which an individual is raised influences their long-term health and developmental outcomes. Simply put, cumulative risk proposes that the more risks a child encounters, the more it will compromise their health and development.[24] For instance, if a child lives in poverty, in a high HIV-prevalence area, with high rates of community violence, and is exposed to maternal depression and violence in the home, their development would be more compromised than the development of a child who only encounters one of these risk factors.[25] Cumulative risk does not only apply to children. Mothers and other caregivers may be exposed to cumulative risk during their adult lives which may impact on their own wellbeing as well as the children they care for.

Finally, **developmental cascades** describe the way in which all individual functioning[26] either builds upon or is limited by prior experience. Early functioning in one area of development will influence functioning in other domains. For example, a child who develops emotional problems in response to violence in the home, may go on to have academic difficulties later in life, because their capacity

Table 21: Key risk and protective factors in childhood and adolescence

	Antenatal period	Infancy	Early childhood	Later childhood	Adolescence
Key risk factors	• Alcohol exposure • Maternal depression and anxiety • Poverty • HIV exposure • Violence exposure • Maternal substance use • Toxin and pollutant exposure	• Maternal depression and anxiety • Poverty • Experiences of/ exposure to violence and abuse • Unresponsive caregiving or neglect • Toxin and pollutant exposure	• Maternal depression and anxiety • Poverty • Experiences of/ exposure to violence and abuse • Unresponsive caregiving or neglect • Toxin and pollutant exposure	• Poverty • Experiences of/ exposure to violence and abuse • Early exposure to substances • Low parental supervision • Toxin and pollutant exposure	• Poverty • Experiences of/ exposure to violence and abuse • Early exposure to substances • Low parental supervision • Negative peer influences • Toxin and pollutant exposure
Key protective factors	• Maternal social support • Breastfeeding • Maternal employment •	• Caregiver social support • Responsive caregiving and opportunities for early learning • Clean environment free of toxins	• Social protection • Presence of early childhood learning centres • Responsive caregiving and opportunities for early learning • Clean environment free of toxins	• Social protection • School attendance • Postive parenting • Clean environment free of toxins	• Positive parenting • Positive peer network • Social protection • Family connectedness • High school completion • Clean environment free of toxins

Adapted from: Department of Health (2003) *National Child and Adolescent Mental Health Policy*. Pretoria: DoH.

to focus is limited. Positive and negative outcomes are underpinned by the same processes, so good outcomes can be laid in motion by good early foundations, and poor outcomes can be set in place by negative early experiences.[27]

Each of these concepts describe the developmental origins of adolescent and adult mental health problems. If we want to act effectively to address risks to mental health, we need to acknowledge this temporal dimension and intervene appropriately – beginning early and continuing across the life course.

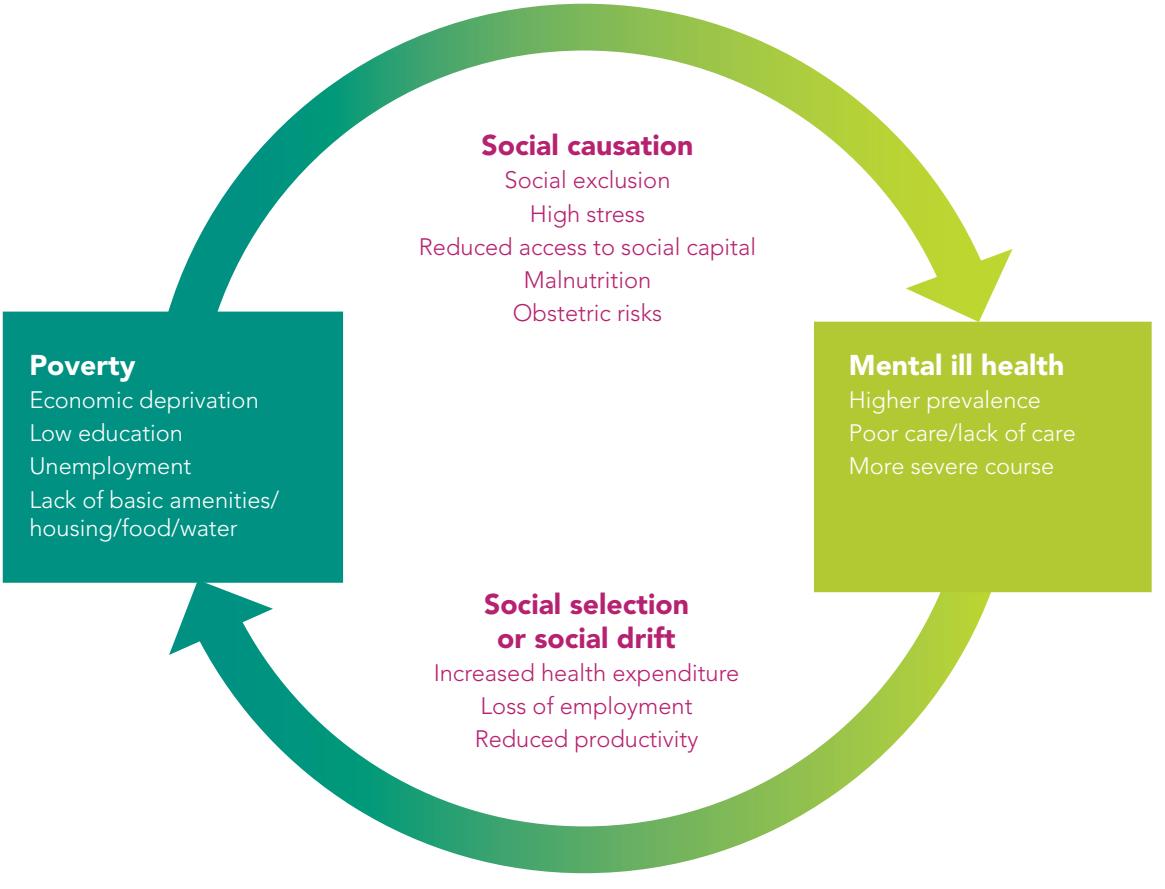
Thinking about time is important when we consider mental health, as the causal chains in the origins of mental health disorders are long. A life course approach to mental health and mental health conditions alerts us to the importance of thinking about development cumulatively, rather than as discrete events characterised by entirely novel and unprecedented risks; and to consider the differential impact of acute versus chronic mental health problems on child and adolescent development over time.

A note on the importance of context and ecology

While attention needs to be paid to the dimension of time, it is equally important to attend to context. **Social factors** influence human mental health in many, interconnected ways. Three explanatory mechanisms can be used to conceptualise the relationship between mental health and the social and physical environment.[28] These include social drift, social causation and a life course perspective.

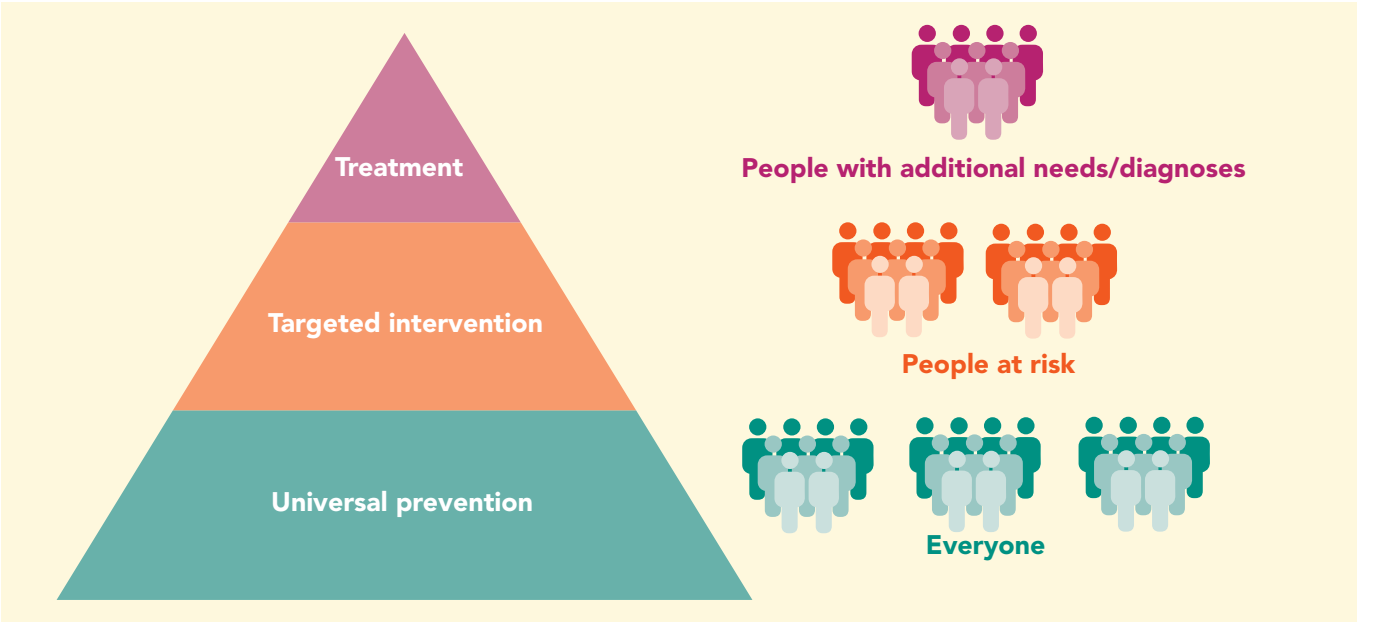
Social drift holds that an individual's mental health influences their socio-economic status (SES).[29] For instance, a person who has a mental health condition may be discriminated against and be excluded from employment opportunities, leading to financial stress. **Social causation** describes the converse of this relationship; and how SES influences health, including mental health. Here, people facing socio-economic adversity are more likely to experience mental health conditions. For instance, an adolescent living in a poor household or community may be exposed to daily financial stressors which weigh on them, resulting in stress and depression. Importantly, these processes are cyclical and can be linked over generations, with one person acquiring

Figure 40: The cycle of poverty and mental ill health



Source: Lund C, de Silva M, Plagerson S, Cooper S, Chisholm D, Das J, Knapp M & Patel V (2012) *Poverty and /mental Health Conditions: Breaking the cycle in in low-income and middle-income countries. Prime Policy Brief 1.* Cape Town: Programme for Improving Mental Health Care, UCT.

Figure 41: The public health pyramid



a mental health condition and falling into poverty, and their child living in poverty and being at risk for a mental health condition.[30] A life course perspective recognises the influence of both mechanisms over time.

Social inequalities and poverty increase the risk of common mental health conditions in caregivers, which have detrimental effects on their children.[31] Importantly, exposure to adversity – in the shape of poverty, violence, unstable housing and other social determinants – can influence child, adolescent and adult mental health in a number of indirect ways, meaning that if we are looking for causes of mental health conditions, we not only need to take a temporal perspective: We also need to look outside of the individual – to their community, context and the policies in their countries – to understand and address their mental health. Mental health can be undermind or promoted through social norms, including patriarchy; political and economic forces, including inequality; and national laws, policies and programmes, including whether or not mental health is adequately budgeted for at the national level.

What are the implications for intervention?

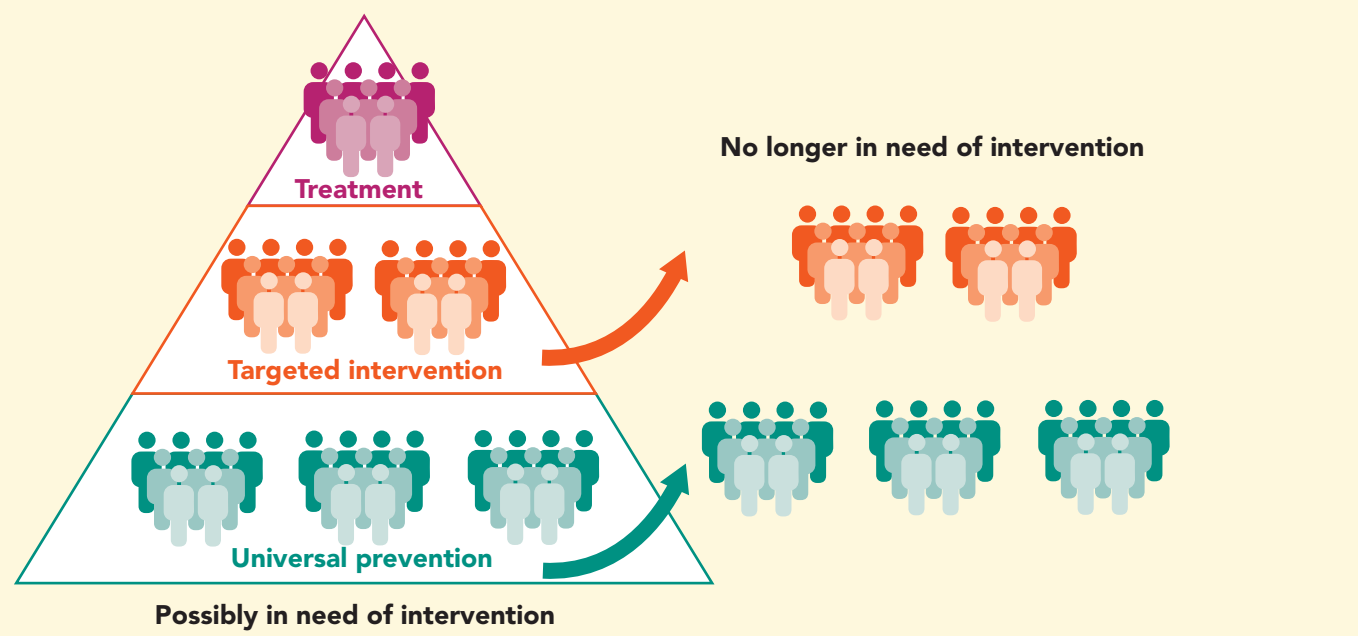
Taking an ecological life course perspective on mental health has implications for intervention. The origins of mental health and mental health conditions lie early in life and – often – far away from emerging conditions. As complex as the causes are, so do our prevention and intervention efforts need to be multipronged and multilevel. Figure 41 (adapted from the Nurturing Care Framework[32]) illustrates how different intensities of intervention are necessary for different segments of the population, based on their risk exposure and outcomes over time. A large number of people require universal interventions, followed by those individuals at risk and in need of targeted interventions, while relatively few people require treatment.

In our violence example, investment in early literacy projects (universal intervention) or maternal mental health programmes for women at risk (targeted intervention) are not silver bullets. Neither is directly investing only in rehabilitating violent individuals (treatment). Even with world class universal preventative interventions, some individuals will go on to develop mental health problems, abuse substances and engage in violence. However, as our violence example illustrates, there are a number of potential points at which to intervene – where targeted evidence-based action can limit the flow of individuals from one level of risk exposure to the next.

As illustrated in Figure 42, there will always be individuals who require targeted, evidence-based, high quality intervention for mental health conditions. But timeous intervention at the correct level prevents a proportion of individuals from requiring future, more targeted intervention. If we invest extensively in interventions and environments which we know protect individuals against risk for mental health conditions, the number of people requiring treatment, will, in the long term, decline.

In the section that follows, we highlight case studies of evidence-based interventions for the mental health of South African children, adolescents and families. Before doing

Figure 42: Leaving the pyramid



so, it is worth highlighting some cross-cutting principles of intervention:

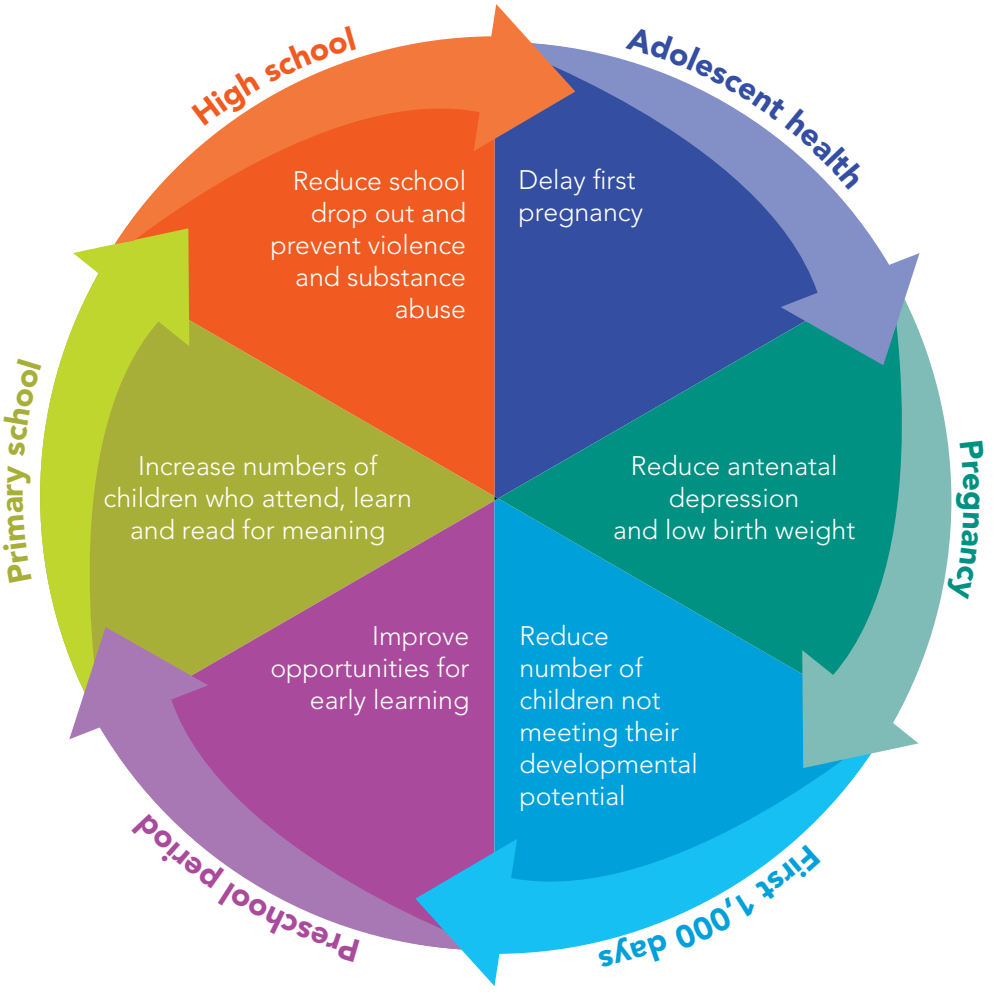
- **Public health pyramid approach:** It is essential to think beyond treatment, and to invest in prevention and promotion in order to ensure maximum benefit for the largest number of people. Recognising the temporal and social influences on mental health brings into focus the importance of prevention, universal, targeted and indicated services.[33]
- **Starting early:** There is significant value to early intervention, as evidenced by the earlier discussion of embedding and cumulative risk. Early exposure to risk and adversity can set children on a detrimental developmental path. Investing early in the life course and adopting a staged approach to mental health – starting with promotion (for everyone), followed by prevention (for those at risk) and treatment (for those who have developed a mental health or substance use disorder),[34] is one way to prevent toxic stress and ensure that risk does not accumulate.
- **Timing:** Early intervention is built on by later interventions, and the timing of interventions should be considered to ensure optimal positive effects for children. A life course perspective necessitates that we focus on the first 1,000 days of life and early adolescence as two sensitive periods of development when interventions can have a significant impact.[35]
- **Integrating mental health:** There is a need to mainstream and integrate mental health into the broader package of care, because risks in any domain of child development can impact on long-term mental health.[36]
- **Building an enabling environment:** Policies and programmes are required to address the broader social determinants of health, such as social protection, alcohol regulations.[37]

Investing in child and adolescent mental health is unlike many other public health priorities, as it cannot be fixed with a once-off innoculation. It requires sustained investment and intervention at strategic points throughout the life course (as illustrated in Figure 43). It requires investment which has universal aspects (everybody gets something – such as improved health care and education), targeted aspects (maternal depression), and indicated/treatment aspects (specialised help such as for disability). There is no quick fix, no single time point, and no magic bullet.

What is in place in South Africa, and what do we need?

In South Africa, the National Child and Adolescent Mental Health Policy Framework of 2003 was developed to guide the establishment of provincial policies in this area. The document is underpinned by a focus on primary care and intersectoral coordination. The policy also centralises protective factors in conceptualisations of child and adolescent mental health. It highlights positive influences at all levels, which can provide strengths and cultivate resilience for children, adolescents and their families. These include:

Figure 43: Intervening at strategic points across the life course to disrupt the cascade of poor mental health



Box 12: The role of the workforce

In order to implement an evidence-based mental health agenda in the public health system, two things are necessary: first, mainstream health-care workers need to be sensitised to mental health and capacitated to delivery mental health-informed interventions; second, additional workers are needed to deliver mental health-care services in a more specialised capacity. The same applies for the integration of mental health-informed interventions in education or any other sector.

In the health-care sector, systems strengthening for mental health will include initiatives aimed at training nurses working in maternity care to be sensitive to maternal mental health; and training health-care workers at clinics to deliver brief early child development content on stimulation and responsive care to mothers of young children. There is a widespread recognition that task-shifting approaches are effective in improving mental health care coverage, and so cadres of community health workers should be trained and leveraged to deliver mental health interventions.

However, in employing these approaches, it is imperative for the feel of services – the quality of delivery as perceived by users – not to be compromised. Training health workers is central to the success of task-shifting in mental health. They should be trained to provide child- and adolescent-centred care; to identity and respond to signs of substance abuse anxiety, depression and trauma; and to do so in a manner which is sensitive, evidence-based and does not further alienate vulnerable populations.

- biological factors (including age-appropriate physical development and good physical health),
- psychological factors (including the ability to learn from experiences and social skills),
- family factors (including family attachment and rewards for involvement in family),
- school factors (including opportunities for involvement in school life), and
- community factors (including positive cultural experiences and legislation that is favourable for development).

It is worth noting that the Child and Adolescent Mental Health Policy in South Africa has subsequently been included under the National Mental Health Policy Framework and Strategic Plan 2013 – 2020.[38] This document includes a focus on child and adolescent mental health in the context of school (including early childhood development, primary and high school), highlighting them as sites of prevention and early intervention. This makes an important contribution to our thinking about child and adolescent mental health: multi-sectoral action is needed. While much work situates mental health and mental health conditions within the purview of health-care services alone, the National Framework points to the need for intersectoral interventions. This underscores the need to address the social determinants of health in supporting maternal, child and adolescent mental health from multiple perspectives and sectors.

(universal, targeted, and indicated, as well as health promotion, prevention and treatment) to support mothers, children and adolescents. While universal interventions are aimed at all children in a particular setting, selective and indicated interventions are targeted at children who are at a higher risk of developing mental health problems. For instance, children with developmental disabilities and their caregivers may be targeted for additional support to prevent the development of mental health comorbidities. Such programmes can include parenting support as well as evidence-based content for children with developmental disabilities.

Research on what interventions work in low- and middle-income countries remains limited, but there is a growing evidence base of promising interventions.[39] In early childhood, a universal approach targeting overall child development has been shown to have benefits for longer-term child mental health. These include early stimulation interventions (through "play, praise and reading");[40] interventions to improve caregivers' sensitivity and responsiveness; integrated nutrition, health, and stimulation programmes; high-quality preschool; and cash transfers to families.[41] Evidence-based interventions for prevention of behavioural disorders include parent training in behaviour management, teacher training in classroom management, and psychosocial interventions with children. School-based interventions to prevent emotional disorders in older children and young adolescents have also shown benefits.

Table 22: Priorities for investment in mental health in South Africa

	Antenatal- and postnatal period (mothers and infants)	0 – 5 years	6 – 10 years	11 – 19 years
Platform	• Health facilities • Community health workers • Caregiver groups • Family	• ECD centres • Health facilities • Family	• Primary schools Caregiver groups • Family	• High schools • Healthcare facilities • Community • Family • mHealth
Interventions	• Screening and counselling for antenatal and postnatal depression and anxiety • Life skills and problem-solving interventions • Stunting prevention including macro- and micro-nutrient supplementation	• Nurturing care interventions • Quality ECD programmes • ECD feeding programs • Screening for developmental delay and disability • Child protection	• Quality schooling and after-school facilities • Universal prevention of violence, bullying and substance use prevention • Early monitoring of prodromal symptoms of mental disorders	• Quality schooling and after-school facilities • Targeted prevention of violence, bullying and substance use • Access to quality sexual and reproductive and mental healthcare interventions

Case 16: The Perinatal Mental Health Project
Preventing childhood adversity by preventing and treating maternal depression and anxiety

For nearly two decades, the Perinatal Mental Health Project (PMHP) has been developing and refining a package of integrated mental health services for pregnant and postnatal (perinatal) women in collaboration with the Departments of Health and Social Development and the NGO sector.[42] The services consist of several components that include universal health promotion and prevention, and capacity development.

The PMHP service design has predominantly focussed on the primary level maternity service environment as its entry point to care. Here, a universal approach is taken where those waiting for their antenatal appointments are given basic education and engaging reading materials on maternal mental health conditions and intervention options. At the first antenatal visit, all mothers are offered mental health screening as a routine part of the general history-taking process. PMHP developed a brief, locally validated screening tool for depression and anxiety which is now included in the standard maternity care stationery. This education and screening intervention has the potential to prevent the progression of existing conditions or the development of new mental health conditions later in pregnancy or the postnatal period. Women who screen positive for risk factors or mental health symptoms are actively referred to supportive counselling.

The PMHP also works closely with a wide range of existing service stakeholders to develop a strategy for integrating mental health services into primary care in order to empower staff and ensure ownership. For this to happen, key factors for frontline workers are addressed, including mental health literacy, capacity-building and support for the mental health of staff, themselves.

High levels of staff compassion fatigue, burnout and mental ill-health have been documented amongst South African healthcare workers,[43] particularly in maternity settings.[44] Furthermore, disrespectful and abusive maternity care has been widely reported.[45] This capacity building approach directly addresses these realities and includes the strategies for embedding simple self-care practices into personal and professional routines. Possible avenues for self- and peer-referral for mental health support are described and normalised. The capacity-building work integrates care for self with care for mothers in distress. Several multi-media resources have been developed to support this training, which has now been incorporated in national and provincial training platforms.

A recent global review[46] found that universally delivered interventions can improve adolescent mental health and reduce risk behaviour; and identified three key programme components – interpersonal skills, emotional regulation, and alcohol and drug education – as being consistently effective across multiple mental health outcomes. However, most of the studies identified by the review were from high-income settings, highlighting the need for further research to build the evidence base of effective models of prevention and treatment in low-income and middle-income countries.

All of these interventions will require greater investment in order to strengthen the workforce for mental health, as outlined in Box 12.

What actions need to be prioritised?

There is a strong temporal dimension to mental health and wellness as most mental health conditions have their origins in earlier periods of development. Therefore, a life course perspective is essential. Multiple levels of a child's environment influence their mental health, so it is imperative to address causes at different levels and across a range of platforms as outlined in Table 22.

A range of innovative prevention and treatment programmes have been developed in South Africa and we are in the process of building an evidence base to establish what works, drawing on the lessons internationally. Three local case studies illustrate important areas of work in South Africa which aim to provide sustainable services, at scale. This includes:

- The Perinatal Mental Health Project – which aims to build the capacity of health workers to integrate mental health screening in antenatal care (Case 16);
- Flourish – a community-based programme initiated by Grow Great that supports pregnant women and new mothers (Case 17); and
- Helping Adolescents Thrive – a global collaboration designed to prevent mental health disorders, violence and substance abuse in adolescence (Case 18).

Case 17: Flourish – Grow Great
Preventing stunting by promoting maternal mental health

The Grow Great Campaign was founded in 2018 in response to the alarmingly high levels of stunting in South Africa that affect an estimated 27% of children under five.[47] Stunting is a preventable condition that results from chronic malnutrition and hampers the long-term health, educational, socio-emotional and economic prospects of affected children. The drivers of stunting are complex, begin in utero and include factors in the home (like access to nutritious food) and in the community (like access to clean water and adequate sanitation). Promising progress in addressing stunting has been achieved by supporting pregnant and new mothers in the first 1,000 days, from conception to age two, when babies are most vulnerable to the effects of chronic malnutrition and when caregivers are forming their approaches to parenting and require a great deal of support.[48] With this in mind, the Grow Great Campaign launched Flourish, a national social franchise of community-based antenatal and postnatal groups that support and empower pregnant women and new mothers through the critical first 1,000 days. The ten-week programme uses a carefully crafted universal promotion and prevention curriculum that addresses the various drivers of stunting through the promotion of breastfeeding and complementary feeding, early antenatal booking, maternal nutrition and maternal mental health. The antenatal and postnatal groups seek to drive mother-empowered behaviour change and also provide essential social support which has the potential to improve maternal mental health which, if not protected, can adversely affect infant feeding practices, infant growth and cognitive development and food security.[497]

A 2018 internal analysis of entry and exit surveys showed a statistically significant improvement in pregnant women's perceptions of whether they were coping with their pregnancy and the prospect of a new baby. The Grow Great internal evaluation suggests that antenatal support groups such as those provided by Flourish offer an important source of support for South Africa's mothers. This form of social support may not be readily available in most of our country's communities, but shows promise in helping mothers cope with the demands of pregnancy and a new baby.

Conclusion

The three case studies showcase the importance of designing evidence-based programmes and building capacity – including supportive supervision. National attention and budget need to be allocated to developing, enabling and caring for the personnel required to provide support for mental health, particularly the mental health of women and children. The importance of this work for the development of our society should be acknowledged through allocation of adequate status and resources by government.

The cases illustrate the importance of investing early and taking an upstream approach to promote health and prevent mental health conditions. Interventions should recognise the temporal and social influences on mental health and be appropriately targeted. They should also start early – and the timing of interventions should be considered to ensure optimal positive effects for children. Where possible, mental health services should be integrated into broader packages of care, because risks in any domain of child development can impact on their long-term mental health. To echo the statements positioned at the outset of this chapter:

- In order to reduce the burden of mental health disorders, substance abuse, and violence, we need to intervene, universally, early in the life course, in order to reduce the number of individuals who require later, intensive intervention.
- In addition, it is vital to adopt a broad, ecological approach: investment in mental health cannot simply entail investment in mental health services or psychosocial programmes, but must extend into schools, communities, the economy, and beyond.

Case 18: Helping Adolescents Thrive
Preventing mental health disorders, violence and substance abuse in adolescence

The Helping Adolescents Thrive (HAT) project aims to promote and improve adolescent mental health – and mental health across the life course – by designing a package of interventions that affect multiple outcomes. The project is a collaboration between the World Health Organization, UNICEF, Stellenbosch University and University of Cape Town. The project aims to develop an open access package of empirically supported psychosocial interventions to enhance adolescents' cognitive, emotional and social capabilities and skills, applicable for use in less resourced settings through different delivery platforms.

The HAT intervention package will be targeted at adolescents (10 – 19-years old). This stage is recognised as one of the optimal timeframes for intervention due to the adolescent brain's neuroplasticity (capacity to change) and the development of multiple areas of brain connectivity in this period. The package will adopt a range of strategies, including universal, targeted and indicated interventions. Universally delivered interventions are programmes that are targeted at the whole adolescent population and designed to benefit everyone. Targeted interventions focus on individuals or communities at risk of developing mental health problems or risk behaviours due to factors such as poverty, health status (including HIV and pregnancy), migration, and exposure to violence. Indicated interventions are programmes for adolescents who have existing symptoms of mental health condition or elevated risk behaviours.

HAT is engaging partners – including other UN agencies, youth associations and civil society organisations – in initial planning and later field testing, to facilitate multidisciplinary input into programme design and development, and to support the dissemination and sustainability of the final product. Ultimately, HAT will support governments and other partners to implement the package – helping build capacity and monitoring implementation.

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