

PERSPECTIVES

Mental health promotion initiatives for children and youth in contexts of poverty: the case of South Africa

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SUMMARY

In order to achieve sustainable development and a consequent reduction in levels of poverty, a multisectoral response to development incorporating pro-poor economic policies in low- to middle-income countries (LMICs) is required. An important aspect is strengthening the human capital asset base of vulnerable populations. This should include the promotion of mental health, which can play an important role in breaking the intergenerational cycle of poverty and mental ill-health through promoting positive mental health outcomes within the context of risk. For each developmental phase of early childhood, middle childhood and adolescence, this article provides: (i) an overview of the critical risk influences and

evidence of the role of mental health promotion initiatives in mediating these influences; (ii) a background to these risk influences in South Africa; and (iii) a review of mental health promotion initiatives addressing distal upstream influences at a macro-policy level in South Africa, as well as evidence-based micro- and community-level interventions that have the potential to be scaled up. From this review, strengths and gaps in existing micro- and community-level evidence-based mental health promotion interventions as well as macro-policy-level initiatives are identified, and recommendations made for South Africa that may also have applicability for other LMICs.

Key words: poverty; South Africa; mental health promotion; children

INTRODUCTION

In high-income neo-liberal societies, increasing attention is being paid to the 'modernity paradox' whereby, in the face of wealth and abundance flowing from neo-liberal free market economic policies, there are increasing wealth differentials which are linked to health and well-being disparities in children (Li *et al.*, 2008). This has implications for human development of these nations. The adoption of similar economic policies that have favoured wealth creation as a means to enter the global economy in many

low- to middle-income countries (LMICs) have also contributed to increasing poverty and wealth disparities in some countries, notwithstanding overall economic growth (Kothari, 1999; UNDP (United Nations Development Programme), 2003). The challenges confronting the health and well-being of children in these post-colonial emerging economies, which have inherited a backlog of disadvantage and have a much lower health and socio-economic base are, understandably, much greater.

South Africa is no exception. Despite an overall decline in poverty levels in South Africa

between 2001 and 2005, largely through social grants, post-apartheid South Africa remains one of the most unequal countries in the world, with income inequality actually increasing over the same period (Woolard and Woolard, 2008). The legacy of apartheid, which created huge differentials in human development, measured by health, education and living standards between whites and blacks, is being perpetuated on a class basis, and aided by the HIV/AIDS pandemic. Post-apartheid South Africa has not shown substantive gains, being ranked 129th of 182 countries on the Human Development Index in 2007 (UNDP, 2009). With respect to life expectancy, South Africa ranks among the worst 30 countries in the world and under five child mortality, which is commonly used as a key social indicator of overall development, showed no improvement between 2001 and 2004 (Woolard and Woolard, 2008).

While health and education are at the core of human development necessary for socio-economic development (UNDP, 2003), it cannot be developed in isolation from social and political, economic, physical/infrastructural and natural capital development which, together with human capital, form the pillars of the sustainable livelihood developmental framework (Brocklesby and Fisher, 2003). No single approach to addressing absolute and relative poverty in South Africa can be sufficient on its own. Helping South Africans move out of poverty is complex, and requires the political will of government to adopt policies across a range of sectors that will foster greater equity and sustainable development.

Despite the clear need for a multisectoral response to poverty alleviation and development, the links between mental health challenges and poverty are commonly overlooked. This is in the face of evidence that poor mental health can impede optimal development and functioning and inhibit people from becoming productive members of society. Impaired cognitive and socio-emotional development in early childhood traps people in a negative cycle of poor educational achievement and reduced productivity and wage earning potential which is transmitted to the next generation (Grantham-McGregor *et al.*, 2007). It is estimated that the cognitive abilities of over 200 million children in LMICs is impaired as a result of poverty associated malnutrition and inadequate care (Grantham-McGregor *et al.*, 2007).

In the face of this negative cycle, while there is a clear need to address the social determinants or distal upstream risk factors for mental ill-health, there is increasing evidence in LMICs to support the role of specific mental health promotion interventions in promoting more positive mental health outcomes through mediating and promoting resilience within the context of risk across the lifespan (Patel *et al.*, 2008; Petersen *et al.*, 2010). Mental health promotion interventions during early childhood (0–5 years) are critical given the disproportionate impact of exposure to risk influences on physical, cognitive and socio-emotional development relative to other developmental periods. The relationship of pre-existing vulnerabilities to negative health outcomes is, however, not a linear one. Amelioration of pre-existing vulnerabilities towards healthy outcomes is also possible during middle childhood and adolescence (Richter, 2006; Tomlinson and Landman, 2007), and is critical in emerging economies such as South Africa where the chances of exposure to high risk influences during the early critical years are much higher given widespread poverty and under-developed services.

To reflect the complexities and opportunities for preventing and ameliorating negative outcomes for each of these developmental phases, this paper provides an overview of the critical risk influences and evidence of the role of proximal mental health promotion initiatives in mediating risk influences during these phases as well as risk influences and the need for mental health promotion initiatives in South Africa. Adopting Bronfenbrenner's (Bronfenbrenner, 1979) ecological–developmental understanding of the promotion of protective mediating influences, whereby proximal health enhancing micro- and community-level processes, characterized by specific mental health promotion programmes are supported by protective upstream influences dependent on distal health enhancing policy-level initiatives, the aim of this study is to provide a narrative review of (i) existing policy-level initiatives in South Africa which address distal upstream risk influences; and (ii) selected evidence-based micro- and community-level interventions for each developmental phase. From this review, gaps are identified and recommendations made for mental health promotion initiatives in South Africa which may also have applicability for other LMICs.

METHOD

A narrative review approach was used given the need to cover a wide range of issues ([Educational Research Review, 2009](#)). In addition to a review of policies across multiple sectors in post-apartheid South Africa which address distal upstream risk influences, micro- and community-level evidence-based studies were selected and reviewed on the basis of the following criteria: (i) the use of a scientifically rigorous evaluation methodology, ideally a randomized control trial (RCT) design using established outcome measures; (ii) other systematic review studies.

EARLY CHILDHOOD

Critical risk influences and evidence of the mediating role of mental health promotion programmes

It is well documented that poor nutrition; exposure to toxic substances, including alcohol use; trauma during labour; as well as maternal depression and lack of stimulation can impact on a child's cognitive development and social-emotional status ([Richter et al., 2010](#)). Many of these negative influences occur within a child's microsystems, defined by Bronfenbrenner ([Bronfenbrenner, 1979](#)) as a child's basic relationships with others. Within a child's early years, distal upstream protective influences are thus crucial for optimum development, but need to be equally supported by the promotion of health-enhancing microsystem influences.

It is now well established that impaired cognitive, behavioural and emotional development in children has been linked to problems in parent-infant communication and attachment which have in turn been linked both to maternal depression and to difficult social circumstances ([Murray and Cooper, 2003](#)). Infant feeding is an interactive process, with infants of depressed mothers been shown to develop a 'depressed like' style of interaction with other adults ([Field et al., 1985](#)) which may contribute to a negative cycle of neglect. Infant nutritional programmes may thus need to give attention to maternal sensitivity and responsivity to infants as well ([Tomlinson and Landman, 2007](#)).

Psychosocial treatment for depression and specific mental health programmes focusing on parent–infant interaction have been found to

help prevent impaired cognitive development and behavioural and emotional problems in disadvantaged children ([Murray and Cooper, 2003](#); [Engel et al., 2007](#); [Rahman et al., 2008](#)).

Risk influences and need for mental health promotion initiatives in South Africa

In relation to upstream distal influences, post-apartheid South Africa inherited relatively high levels of malnutrition in children aged 1–6 years as revealed by a national food consumption survey in 1999—21.6% of children were stunted and 10.3% were underweight. In addition, inadequate micronutrient intakes were reported in 50% of South African children ([Bourne et al., 2007](#)). Further, early childhood development (ECD) services were highly inequitable across the dimensions of race, location and disability, with rural black disabled children having almost no service provision ([Biersteker and Dawes, 2008](#)) as a result of apartheid policies.

With regard to micro-level risk influences, maternal depression appears to be particularly high compared with other LMICs, where it is estimated to be between 20 and 30% ([Rahman, 2005](#)). In Khayelitsha, a township in the Western Province, 34.7% of women were found to suffer from post-natal maternal depression ([Cooper et al., 1999](#)) and 41% of women in three typical antenatal clinics in rural KwaZulu-Natal were found to be depressed ([Rochat et al., 2006](#)). While upstream poverty-related social conditions such as food insecurity, inadequate housing, unsafe social conditions, unstable income resulting from unemployment or under-employment and low levels of education have been associated with common mental disorders including depression in LMICs ([Patel, 2005](#)), maternal depression in South Africa has also been reported to be linked to a number of psychosocial problems including adjusting to an HIV+ status, social isolation and rejection as well as interpersonal disputes relating to paternity issues ([Baile et al., 2009](#)).

Further, alcohol use in pregnancy is also a major problem in South Africa, particularly in the Western Cape province, with one community study recording the highest rate of foetal alcohol syndrome (FAS) in the world ([Viljoen et al., 2005](#)). The high rate of alcohol consumption in the Western Cape can be traced back to the 'dop' system during apartheid where wine was distributed daily to workers on wine farms

as part payment for labour. While this practice has been outlawed, there is a perpetuation of heavy episodic alcohol consumption (Viljoen *et al.*, 2005).

Results of narrative review

Macro-policy-level initiatives addressing upstream risk influences

Within post-apartheid South Africa, the importance of ECD is clearly recognized at a macro-policy-level across a number of sectors (Richter *et al.*, 2010). The introduction of a child support grant in 1998 for children under the age of 7 years has assisted in alleviating poverty and improving food security in the most vulnerable populations (Lund, 2006), with 2.86 million children between the ages of 0 and 4 years being in receipt of this grant in 2007 (UNICEF, 2007). Further, the National Integrated Plan for ECD (NIP for ECD) (Departments of Education, Health, and Social Development, 2005) and the Integrated Nutrition Programme (Department of Health, Directorate of Nutrition, 2002) have both assisted vulnerable parents and children. Through this programme: (i) nutritional policies involving iodization of table salt and food supplementation have been implemented (Jooste *et al.*, 2001; Bourne *et al.*, 2007; UNICEF, 2007); and (ii) household food security promoted through the National School Nutrition Programme, including the provision of food to Early Childhood Development Centres as well as specific food supplementation programmes for underweight and growth faltering HIV-infected children (Bourne *et al.*, 2007).

Within the education sector, post-apartheid South Africa has also made considerable strides, with the White paper 5 on ECD (Department of Education, 2001) introducing policy for all children to have access to a reception year of schooling by 2010. In the years 2000–2003, although Grade R enrolment increased by 39% in public and independent schools, the quality of the services provided remains uneven across racial and socio-economic lines (Biersteker and Dawes, 2008).

Evidence-based micro- and community-level interventions

Interventions to promote mother–child attachment. One evidence-based intervention of

a home visitation programme using trained community-based workers to provide counselling as well as a specific mother–child intervention for poor women is available involving 2 antenatal and 14 postnatal visits over 6 months. It was evaluated using an RCT in the Western Cape (Cooper *et al.*, 2009). This RCT showed good effects, improving maternal sensitivity and reducing intrusiveness at 12 months post-intervention. At 18 months, participant children were more securely attached than controls (Cooper *et al.*, 2009).

Programmes to reduce alcohol use in pregnancy. While a non-randomized community Foetal Alcohol Syndrome prevention study is currently underway in the Western Cape (Parry and Seedat, 2008), no data as to the efficacy of this intervention are yet available.

MIDDLE CHILDHOOD

Critical risk influences and evidence of the mediating role of mental health promotion programmes

Middle childhood is commonly understood as the period between the ages of 6–12 years and is marked by the commencement of formal primary schooling. During middle childhood, children develop new capacities in terms of cognitive, emotional and social functioning which can be impeded by poor family environments and schooling (Bhana, 2010). Secure family attachments during middle childhood are important for the development of interpersonal competence, as they constitute the foundation for interpersonal relationships outside of the family. Children with insecure attachments have been found to be at increased risk of being less liked by peers and teachers and developing greater behavioural problems than their more attached counterparts (Cohn, 1990).

Children growing up in contexts of poverty are at risk of negative influences within both family and schooling environments. Children in low-income families have been found to be exposed to greater levels of violence, family disruption and separation from their families than those from high-income families (Evans, 2004). School plays an important role in children's social and learning environments. Among school children, school connectedness has been

found to be associated with a sense of belonging and positive self-esteem, internal regulation of emotions, positive attitudes toward school and motivation to achieve (Schochet *et al.*, 2006). While poor schooling environments, which characterize many LMICs, impede the development of all children, children with emotional and learning disorders are particularly disadvantaged as a result of a lack of special services to cater for their specific needs, and are at risk of academic failure and eventual school dropout (Patel *et al.*, 2008).

As with early childhood, pro-poor multisectoral development initiatives that promote distal protective influences are crucial for optimal development during this phase. There is, however, also evidence that specific mental health promotion interventions that promote parent-child attachments and parental control can strengthen the protective social net afforded by families during middle childhood, helping to counter the confluence of multiple risk elements in contexts of poverty (McKay and Paikoff, 2007). Further, interventions promoting school connectedness, which involves a number of dimensions including a sense of belonging, school involvement and positive school climate, including teacher support have also been shown to assist in promoting mental health during the middle childhood years (Bhana, 2010).

Risk influences and need for mental health promotion initiatives in South Africa

In relation to schooling, post-apartheid South Africa inherited a highly unequal educational system across racial lines as a result of apartheid's unequal and segregated educational policies, which ensured that the black population received inferior and poor-quality education. Further, while prevalence data on learning disorders in South Africa is unknown, rates are estimated to be considerably greater than in higher income contexts (Donald, 2007). This is because of the well-documented impact that poverty related poor nutrition and neglect has on cognitive development, with over half of South Africa's children still living in conditions of poverty, which persist into later life (Richter *et al.*, 2005; Makiwane and Kwizera, 2009).

With regard to family environments, the apartheid migratory labour system severely fractured black families and has been sustained in post-apartheid South Africa by circular

migration, whereby income earners move between their rural households and their places of employment or urban dwellings (Lurie *et al.*, 1997). Post apartheid, the HIV/AIDS pandemic has added additional disruption to families. South Africa had an estimated 1 400 000 children orphaned to AIDS in 2007 (UNAIDS, 2008), with children more likely to become a maternal orphan after the age of 5. Between 1998 and 2005, there was a 135% increase in maternal orphans aged 5–14 years (Statistics South Africa, 2006).

Orphans who have lost their parents to AIDS have been found to display elevated rates of posttraumatic stress disorder (PTSD) and depression, conduct problems and delinquency when compared with controls (Cluver *et al.*, 2007) and these problems have been found to be mediated by the experience of AIDS-related stigma (Cluver *et al.*, 2008). Grandmothers, in particular, have cushioned the psychological impact of the AIDS epidemic for many orphans in southern Africa (Chazan, 2008). While they have always taken care of grandchildren in Africa, bringing up orphans in the midst of an AIDS epidemic, however, presents with additional challenges, stretching them financially, physically and emotionally.

Results of narrative review

Macro-policy-level initiatives addressing upstream risk influences

As with early childhood, poverty alleviation policies and plans are paramount, with the child support grant, which assists with poverty alleviation and food security in the most vulnerable populations (Lund, 2006), being extended to children under the age of 15 years in 2005 (Lund, 2008). In addition, a foster care grant assists in the financial provision of orphaned children.

Within the education sector, while educational policies ensured a rapid increase in access to primary school education in the immediate post-apartheid era, problems with the quality of basic general educational provision remain, with South Africa performing poorly on international assessments of achievement in mathematics, science and literacy compared with other countries in east and sub-Saharan Africa (Schindler, 2008). Much more work is required to ensure adequate basic education for all, as well as meeting the

specific needs of children with disabilities and learning disorders (McKenzie and Müller, 2006). Mainstreaming children with the full range of disabilities and learning difficulties into the general education system is central to contemporary South African policy. There remains considerable debate, however, as to whether this is being done with the necessary support and infrastructure to make mainstreaming successful.

Evidence-based micro- and community-level interventions

Family strengthening programmes. One evidence-based programme of an effective family strengthening programme was sourced. This programme, the Collaborative HIV/AIDS Adolescent Mental Health Programme South Africa (CHAMPSA), uses trained community-based workers as facilitators to deliver 10 family group sessions covering a range of topics to multiple family groups. An RCT in the KwaZulu-Natal province demonstrated significant improvements in communication and monitoring and control in the parents/caregivers receiving the intervention compared with controls (Bell *et al.*, 2008). The programme promoted the development of supportive networks for caregivers which assisted in providing greater monitoring and control of children (Paruk *et al.*, 2009), which is particularly important in contexts of poverty which can compromise the protective parent-child relationship (Barbarin, 2003; Paruk *et al.*, 2005). It has recently been adapted to support caregivers of HIV+ children, who are often foster parents (Petersen *et al.*, 2009a).

Programmes to build school connectedness. No evidence-based programmes to promote school connectedness or evidence of effectiveness studies underway could be sourced for South Africa.

ADOLESCENCE

Critical risk influences and evidence of the mediating role of mental health promotion programmes

In adolescence, as parental influence decreases, the acquisition of more complex cognitive abilities and socio-emotional changes associated with individuation allow greater interaction with

others and exposure to new experiences. As a result, peer, media and cultural influences increase (Breinbauer and Maddaleno, 2005). In comparison to other age groups, adolescence is typically associated with a greater likelihood of engaging in experiences and behaviour that may impact negatively on a person's life course and mental health. These include alcohol and drug abuse, non-consensual and high-risk sexual behaviour, self-harm, interpersonal violence and criminal behaviour (Richter, 2006).

Internationally, adolescents living in impoverished areas are vulnerable to widespread exposure to substance abuse and violence in the home, school and neighbourhood. Exposure to violence increases the probability of youth involvement in violence (Van der Merwe and Dawes, 2007) and exposure to deviant peers increases the likelihood of high-risk behaviour (Hoggs and Abrams, 1988; Coleman and Hendry, 2002; Richter, 2006) as adolescents affiliated to deviant peer groups are at risk of developing a common social identification with these peers.

Salient developmentally timed mental health promotion interventions to assist with adolescent developmental tasks and promote healthy outcomes and build resilience in the context of risk include building life skills and providing health enhancing peer group opportunities and a protective neighbourhood ecology.

Lifeskills programmes have been found to assist adolescents to cope with complex life situations, including decision-making, effective interpersonal communication, self-regulation and the pursuit of goal directed behaviour (Patel *et al.*, 2007). They assist with building a positive self-esteem and self-concept which in turn is associated with fewer emotional problems, less sexual and drug-use risk behaviour and better performance in school (Breinbauer and Maddaleno, 2005). Interpersonal and social skills training specifically have been found to assist in reducing violent and anti-social behaviour in youth (Van der Merwe and Dawes, 2007).

Youth participation in organized activities outside of school such as sporting activities and clubs has also been shown to have positive consequences for adolescent psychological and social adjustment and development, school achievement and completion and lowered rates of smoking and drug use (Mahoney *et al.*, 2006).

Risk influences and need for mental health promotion initiatives in South Africa

Apartheid policies of segregation left a legacy of impoverished black communities in rural areas and ‘townships’ in economically marginalized locations with limited leisure opportunities and poor service delivery. Substance abuse, high-risk sexual behaviour and violent crime are all major behavioural problems among youth living in conditions of poverty in South Africa, leading to poor health outcomes and future life course (Brook *et al.*, 2006a, b; Richter, 2006; Van der Merwe and Dawes, 2007). HIV incidence is highest in the 15–24 age range (Rehle *et al.*, 2007). Youth who are 12–22 years are twice as likely as adults to become perpetrators or victims of crime in South Africa (Burton, 2007). HIV infection is associated with increased depression and exposure to violence is associated with increased emotional and conduct problems, particularly PTSD and substance misuse (Van der Merwe and Dawes, 2007).

School dropout which is associated with these risk behaviours and poor mental health outcomes in youth (Townsend *et al.*, 2007; Patel *et al.*, 2008) is a major problem among black adolescents living in impoverished, marginalized areas in South Africa (Wegner *et al.*, 2006). It accelerates from about grade 9 onwards, the reasons for this being manifold, including repeating classes, lack of remedial programmes, poor quality of interaction between teachers and learners (Panday and Arends, 2008), leisure boredom (Wegner *et al.*, 2008) as well as children’s perceptions of their relative poverty to others (Dieltiens and Meny-Gilbert, 2009).

Results of narrative review

Macro-policy-level initiatives addressing upstream risk influences

At the macro-policy level, as with the earlier phases, poverty alleviation policies and plans are essential, with an extension of the child support grant beyond 14 years being phased in, starting with 15 year olds from 2010 (SabinetLaw, 2009). Within the education sector, the issue of school dropout requires far more attention, with an improvement in the quality of education provided to poorer communities being an important consideration. Further, while the eradication of slums and the

provision of adequate housing, infrastructure and community resources are high on South Africa’s development agenda, they continue to persist in the context of widespread poverty.

Evidence-based micro- and community-level interventions

Lifeskills programmes. The HIV/AIDS epidemic in South Africa triggered a plethora of lifeskills and AIDS education programmes for youth by Government Departments, non-governmental organizations (NGOs) and researchers as a means to reduce risk of HIV infection. The majority of these programmes have been implemented in schools. At a macro-policy level, a national lifeskills programme was introduced nationwide in 1998 and fully implemented by 2005 (The Transitions to Adulthood Study Team, 2004).

Despite an increased number of lifeskills interventions, the quality of these programmes has been questioned. A systematic review of school-based lifeskills programmes focusing on sexual health promotion in South Africa found that while some of these programmes demonstrate positive effects in relation to knowledge, attitudes and increased communication about sexuality, they have had limited success in relation to youths’ perceptions of susceptibility to HIV infection, self-efficacy, behavioural intention or actual behaviour change (Mukoma and Flisher, 2008). Programmes have been implemented unevenly in South Africa, with those more fully implemented having more positive effects than those that are only partially implemented (James *et al.*, 2006; Mukoma and Flisher, 2008).

Facilitating health enhancing peer and neighbourhood contexts. Despite international evidence for the protective influence of organized ‘out of school’ activities, except for a few NGO programmes, there are no evidence-based ‘out of school’ programmes for youth living in impoverished areas available.

CONCLUDING DISCUSSION

This review of developmentally timed mental health promotion interventions which have the potential to break the intergenerational cycle of poverty and mental ill-health in South Africa

suggests unevenness in macro-policy-level initiatives to address distal upstream risk influences as well as evidence-based micro- and community-level interventions to promote human development processes across the developmental phases from infancy to adolescence.

Early childhood in South Africa, as is the case internationally (Richter *et al.*, 2010), has received significant attention across a range of sectors with respect to the development of policies to promote protective upstream influences during this critical developmental phase. Particular successes in relation to policy development and implementation in South Africa relate to childcare grants, nutritional support as well as a commendable ECD policy.

With regard to micro- and community-level evidence-based programmes, one RCT study provides evidence of the effectiveness of a mother–child stimulation programme using trained community-based workers in South Africa (Cooper *et al.*, 2009). There is a need for plans within the health sector to ensure resources to scale up this intervention. A gap exists with respect to evidence-based interventions to address alcohol use in pregnant women given data that at least one community in South Africa has the highest rate of FAS in the world, although one study is underway.

With respect to middle childhood, at a macro-policy level, the quality of basic general education is poor and it is unclear whether the South African Department of Education's policy of inclusive education to address learners with disabilities and learning disorders is addressing the needs of this population. There is thus an urgent need to understand this. Lack of human resource capacity is bedevilling the success of mainstream education (Schindler, 2008), let alone services for those with disabilities and learning disorders. Further, in relation to micro- and community-level evidence-based programmes, one RCT study provides evidence of a family strengthening programme using trained community-based workers (Bell *et al.*, 2008). As with the mother–child stimulation programme, there is, however, a need for plans to ensure resources to scale up such interventions. A gap exists with regard to evidence-based interventions to promote school connectedness.

For adolescents, the need for an acceleration of macro-policy-level initiatives to address the upstream factors responsible for high levels of

school dropout through improving the quality and level of educational and other services to impoverished areas is paramount to promote more protective community environmental contexts.

The focus of micro- and community-level mental health promotion interventions for adolescents has been on lifeskills education, given impetus by the HIV/AIDS epidemic. A systematic review of these programmes in South Africa showed, however, that while such programmes have a positive impact on knowledge, attitudes and communication, their impact with respect to actual behaviour change is limited (Mukoma and Flisher, 2008). Further, their utility was found to be compromised by uneven delivery, highlighting weak service delivery capacity within the education sector and the need for attention to human resource development to sustain such programmes.

A significant gap in evidence-based interventions for adolescents is the need for structured 'out of school' programmes for youth to reduce leisure boredom and facilitate opportunities for more health enhancing identities. Studies in high-income contexts suggest that they can be implemented with good effects using trained older youth as mentors [e.g. (Robertson, 2008)].

In conclusion, this review of mental health promotion interventions suggests that post-apartheid South Africa has made some gains with respect to macro-level policies to facilitate more distal protective upstream influences, especially in relation to ECD. There are, however, substantial gaps across all the developmental phases. Further, good policies are not always accompanied by commensurate good practices. Human resource development remains key to ensuring skills and capacity in South Africa to deliver on the promises that macro-level policies hold.

This review also demonstrates that, while there are some gaps, micro-level evidence-based interventions do exist at all three developmental phases, with gaps largely at the community level. In the context of scarce resources, it is also encouraging to note the emerging evidence from South Africa that shows that trained and supported community-based workers can produce good outcomes. Given the shortage of specialist professional categories of workers in South Africa, as well as their cost, in a similar vein to the call for task shifting using trained and supported community-based workers for

scaling up the care and treatment of people with mental disorders in South Africa and other LMICs (Saraceno *et al.*, 2007; Petersen *et al.*, 2009b), these studies hold promise that mental health promotion interventions can be similarly scaled up at minimal cost. Further, the participation of trained and supported community-based workers is made even more desirable with respect to mental health promotion as they engender greater community participation, which has been shown to have favourable outcomes for public health efforts (Nair and Campbell, 2008).

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