

Addressing the social determinants of health

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Between January and March 2008, at least 78 babies died of diarrhoea-related deaths in the Ukhahlamba district of the Eastern Cape. These baby deaths point to failures both within and outside of the health care system, and to persistent structural social and economic injustice. While poor case management, lack of medication and delays in seeking health care were contributing factors, the underlying causes of the diarrhoea outbreak lay 'upstream'. Over 80% of the children who died in Ukhahlamba lived in poverty-stricken households with no sanitation, and local tap water was contaminated by *E. coli* following a breakdown at the local water treatment plant.¹

This essay examines the social determinants of health and explores how child health is shaped by the political, economic, physical and social environment in which children are born, live, grow and develop.

The essay focuses on two key questions:

- What are the social determinants of child health in South Africa?
- What needs to be done to address the social determinants and improve health equity?

What are the social determinants of child health in South Africa?

Children's health is shaped by a range of social determinants. The quality of care in the immediate home environment has a direct impact on child well-being. This in turn is influenced by the family's and community's access to resources and basic services. Ultimately, children's and families' living conditions are shaped by political, socio-economic, cultural and environmental forces in the wider society. Here, poverty and inequality remain major determinants of child health, and these problems are likely to be exacerbated by the global economic crisis and climate change.

The following analysis of child-centred data tracks children's access to a range of socio-economic entitlements and provides a picture of some of the key social determinants that need to be addressed to improve child health in South Africa.

Poverty and inequality

South Africa's poor health outcomes seem perverse in the face of good economic growth since 2000. Yet growth has come at the expense of job creation – with broad unemployment figuresⁱ standing at 33%,² and a Gini coefficientⁱⁱ of 0.666, pointing to inequalities between rich and poor.³

Table 15: Factors affecting infant mortality

Wealth	No. of deaths per 1,000 live births
Poorest 20%	87
Richest 20%	22
Population group	
African	64
White	15
Residence	
Rural	71
Urban	43
Mother's education	
None	84
Matric and higher	46
Province	
Eastern Cape	75
Western Cape	39

Source: Department of Health (2002) *South African Demographic and Health Survey 1998*. Pretoria: DoH; World Health Organisation (2007) *World health statistics 2007*. Geneva: WHO. Both in: Bradshaw D (2008) *Determinants of health and their trends*. *South African Health Review*. Durban: Health Systems Trust.

i The narrow (official) definition of unemployment includes the number of people who were without work and actively seeking work in the four weeks preceding the interview. The broad (unofficial) definition includes discouraged work seekers.
 ii The Gini coefficient is a measure of national income equality. It ranges from 0 (no inequality) to 1 (complete inequality).

Table 16: Child poverty, hunger and access to services in the Western and Eastern Cape, 2008

Child poverty, hunger and access to services	Western Cape %	Eastern Cape %
Without drinking water on site	7	65
Without adequate sanitation	6	50
Without electricity	5	36
Without formal housing	20	50
Far to nearest to clinic	16	53
Reported child hunger	13	22
Living in income poverty	37	72
Without employed adult	11	39

Source: Statistics South Africa (2009) *General Household Survey 2008*. Pretoria: StatsSA. Analysis by Katharine Hall & Double-Hugh Marera, Children's Institute, UCT. See www.childrencount.ci.org.za.

These inequalities lie at the heart of South Africa's poor child health outcomes, some of which are illustrated in table 15. Income, race, education and urbanisation all have a clear impact on infant mortality; as does geographical location: Babies in the Eastern Cape (one of the poorest provinces) are almost twice as likely to die before their first birthday, compared with children in the Western Cape (one of the richest provinces).

South Africa's children are disproportionately affected by poverty. Nearly two-thirds of children live in the poorest 40% of households with a per capita monthly income of less than R570, and racial inequalities persist. More than 70% of African children live in poverty, while less than 5% of White children fall below this poverty line.⁴

Primary health care services and infrastructure remain poor in historically black areas, and the poorest populations are still concentrated in the previous 'homelands' where over-crowding and underdevelopment have led to huge backlogs in services. Table 16 illustrates the inequalities that persist between provinces – in this case the Eastern Cape, which includes former 'homelands', and the better resourced Western Cape.

Poverty not only shapes children's living conditions; it deprives them of access to food, housing, health care and other basic services and has a life-long cumulative impact on health.⁵ This in turn can affect children's school performance and opportunities for future employment (see figure 9). Failure to address social determinants not only keeps children in poor health, but may trap future generations in poverty.

Housing

While the majority of children (71%) live in formal housing, over 2.3 million children still live in shacks or backyard dwellings. Forty percent of children in informal housing are younger than five years, and case 6 on p. 85 shows how these children are particularly vulnerable to burns and paraffin poisoning. Despite the roll-out of the National Housing Subsidy Scheme, the proportion of children living in informal housing has remained relatively constant since 2002.⁶

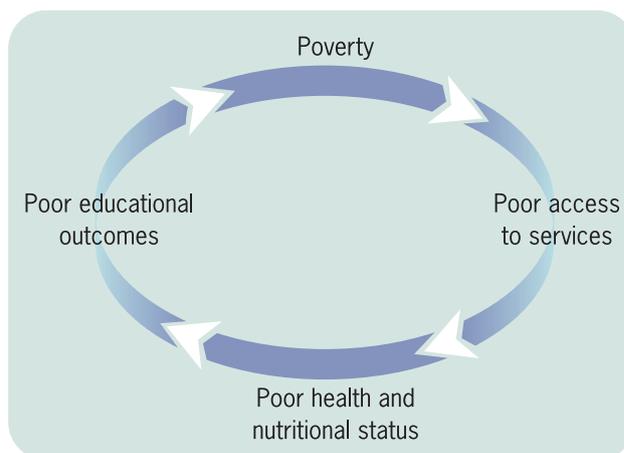
Over 5 million children (30%) live in over-crowded conditions.⁷ Over-crowding is most severe in informal housing and is associated with increased exposure to communicable diseases such as tuberculosis. Over-crowding may increase the risk of sexual abuse when children have to sleep in the same room or bed as other adults and children. It can also compromise children's access to other services, such as free water, which is allocated without taking into account household size.⁸

Water, sanitation and electricity

Government has made significant strides in improving access to basic services, but more needs to be done. Nearly 36% of children in South Africa still do not have access to drinking water on site.⁹

Although children's access to basic sanitation increased from 47% in 2002 to 61% in 2008, 8 million children still use unventilated pit latrines, buckets or open land.¹⁰ Overloaded sewerage systems, inadequate infrastructure and a lack of skilled staff raise serious concerns about water quality in many parts of the country.¹¹ Young children are especially vulnerable to illnesses such as diarrhoea and cholera, and local governments urgently need to invest in improving access to safe water and sanitation.

Figure 9: A cycle of poverty



While most children (80%) live in households with access to electricity,¹² many households cannot afford electricity or appliances, and continue to rely on unsafe energy sources such as paraffin, wood and coal, which are associated with an increased risk of acute respiratory infections and burns.¹³

Hunger and food security

The proportion of children living in households that reported child hunger fell from 30% to 18% between 2002 and 2008.¹⁴ Yet, malnutrition remains common and stunting affects one in five children.¹⁵ Malnutrition also increases the risk of acute respiratory infections, diarrhoeal disease and HIV infection – all major drivers of under-five mortality¹⁶ (see pp. 46 – 52).

Chronic malnutrition has a significant impact on child development, especially during the first three years of life when the brain is still developing. The high prevalence of stunting in this age group is therefore cause for concern,¹⁷ and is likely to have serious implications for future school performance.

Early childhood development

Early investments in children's health and education offer the greatest benefits, and the Global Commission on the Social Determinants of Health has called for greater investment in comprehensive early childhood development (ECD) that links families and young children to health, education and nutrition services.¹⁸ While the Children's Act¹⁹ and National Integrated Plan for ECD²⁰ provide a framework for the provision of services for children under five, delivery has tended to focus on formal grade R classes for older children. Gross enrolment for grade R currently stands at 52% and data are not available for younger children.²¹

Social security and enabling documents

The Child Support Grant (CSG) is a key programme for alleviating child poverty in South Africa, and may account for much of the decline in child poverty from 77% in 2002 to 64% in 2008.²² In May 2010, the CSG supported more than 9.7 million children aged 0 – 16 years,²³ and the grant is steadily being extended to include all eligible children under 18 by 2012. Grant beneficiaries are also entitled to free education and health care services.

Despite these benefits, data analysis estimates that the CSG reached only 71% of eligible children in mid-2008.²⁴ Difficulties accessing birth certificates and identity documents are a major barrier. Access to the CSG early in life leads to better growth and reduces stunting among children.²⁵ Therefore, the low take-up of grants for children younger than six months is of particular concern.²⁶

Birth registration is essential for accessing social grants and for the effective monitoring of child and infant mortality. While birth registration has increased significantly from 25% in 1998 to 82% in 2009,²⁷ more still needs to be done to improve access to enabling documents.

The recent acceptance of alternative forms of identification should help streamline applications for social grants. Access to enabling documents could also be improved by extending the reach of mobile 'one stop' units in rural areas, and by providing birth registration facilities at maternity units at clinics and hospitals.²⁸

Health services

South Africa has made good progress in providing free primary health care, and free health care for pregnant women, children under six, people with disabilities and recipients of social grants. Yet access to public health care services remains a problem, especially in remote rural areas: Over 7 million children (40%) need to travel more than 30 minutes to reach their nearest clinic.²⁹ This compromises access to key preventative services such as growth monitoring and immunisation, and high transport costs and long queues may lead to life-threatening delays in seeking treatment.

Education

Having a mother with secondary school education dramatically reduces the risk of child mortality and is associated with improved nutrition, birth spacing and the use of preventive health interventions.³⁰ In 2001, 48% of people over the age of 15 had not completed grade 9 and 12% had never attended school.³¹ However, the current gender parity in education is promising for future health outcomes, with equal numbers of girls and boys attending high school.³²

Concerns remain around the quality of education³³ and the high level of violence in schools. Recent initiatives to develop schools as centres of teaching, learning, care and support are promising and draw heavily on early efforts to establish health promoting schools.³⁴ Similarly, Education White Paper 6 focuses on inclusive education and calls for the establishment of multi-sectoral teams to support vulnerable learners and to address a range of barriers to education.³⁵

Psycho-social stressors

Child health is not only shaped by broad socio-economic conditions and access to services. Unsafe sex, alcohol harm, interpersonal violence and smoking are important drivers of mortality and morbidity in South Africa and contribute to the high burden of HIV, injury, violence and abuse in children.³⁶

Case 6: Addressing childhood burns

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In South Africa, burns are reported as a persisting threat especially to children in low income settings. It is estimated that up to 1,300 children die every year as a result of burn injuries.⁶⁴ These injuries are associated with the physical and social environments in which young children live.

Children most at risk are those living in informal settlements, where the lack of demarcated cooking areas and dangers associated with the storage and use of paraffin coincide with high numbers of children and high child-to-adult ratios. Infants and toddlers account for up to half of all childhood burns.⁶⁵ Caregiver testimonies highlight how work, household chores, child care, unexpected events and crises undermine their ability to supervise and protect children in hazardous home environments.⁶⁶

Towards good intervention and policy

The improvement of home and neighbourhood environments, through the provision of formal houses, electrification, and access to safe cooking and other home appliances, are key interventions in South Africa. Home environments can be created or modified to reduce the

likelihood of injury. Electrification, stricter building codes, improved construction materials, and the legislated reduction of tap water temperatures can significantly reduce child burns and scalds.⁶⁷

The separation of cooking areas from living areas, and other improvements to housing layout, could limit children's exposure to dangers in the kitchen, and reduce the likelihood of electrical fires and electrocution. Hazards in the home can also be reduced by changing the design of household appliances, such as cooking equipment, and using stove guards to isolate cooking areas.⁶⁸

In South Africa, the electrification of homes is a national priority; however, because of the escalating cost of both electricity and safe electrical appliances, low income families continue to rely on paraffin, coal or wood-fired stoves for cooking and heating, and low quality hot water cylinders for hot water.⁶⁹ In partial recognition of these energy usage patterns, South Africa has also instituted compulsory specifications for pressurised and non-pressurised paraffin stoves and heaters to promote the use of safer paraffin appliances, with their enforcement now considered a priority.

Children in poor communities are particularly vulnerable because poverty exacerbates psycho-social stress and low self-esteem, leaving caregivers and children relatively powerless within the family and wider community.³⁷

Tobacco and alcohol

Babies of mothers who smoke one or more packs of cigarettes a day during pregnancy have lower intelligence quotient (IQ) scores than children of non-smoking mothers.³⁸ Maternal smoking also increases the risk of acute respiratory infections such as pneumonia.³⁹

Increased taxes and the Tobacco Products Control Act,⁴⁰ which prohibited the advertising of tobacco products, contributed to a 40% drop in the prevalence of smoking between 1995 and 2003.⁴¹ A recent amendment to the Act⁴² increased the ban on sales to children from those aged 16 to 18 and should lead to a further decline in smoking.

Similar measures need to be taken to control alcohol misuse, which is implicated in homicide, domestic violence, rape, child abuse, road traffic and other injuries. The health and social costs of alcohol misuse are an estimated R9 billion per year;

yet there has been little concerted effort by the government to address the problem.⁴³ While the National Liquor Act⁴⁴ prohibits the sale and advertising of alcohol to children, and the blood alcohol limit for drivers has been lowered, these measures are actively flouted by both the industry and consumers. A recent survey found that 35% of high school learners used alcohol in the previous 30 days and that binge drinking had increased significantly⁴⁵ (see pp. 53 – 57).

Drinking during pregnancy can lead to permanent brain damage in the unborn child and the prevalence of fetal alcohol spectrum disorder (FASD) in some wine-farming districts of the Western Cape is amongst the highest in the world. FASD is associated with learning and behavioural problems that increase the risk of HIV, unemployment and criminal behaviour later in life.⁴⁶

To address these problems, the government must enforce current legislation and drive a concerted national programme to shift drinking norms.⁴⁷ The *Phuza Wize* media campaign initiated by the Soul City Institute for Health and Development Communication is a step in the right direction, using a television drama series and the accreditation of 'safe' shebeens to raise

awareness about the dangers of alcohol abuse and to encourage people to drink responsibly.⁴⁸ The Prevention of and Treatment for Substance Abuse Act⁴⁹ also provides for community and school-based prevention services specifically aimed at children and families, but this is not yet in operation (see *Part one: Children and law reform* on pp. 12 – 17).

Unsafe sex and violence against women and children

The past 10 years have seen positive developments with the roll-out of the prevention of mother-to-child transmission programme and antiretrovirals. But given escalating treatment costs, there is an urgent need to invest in other prevention strategies.⁵⁰

Unsafe heterosexual sex is the primary driver of HIV. A recent survey suggests a shift towards safer sexual behaviours amongst high school learners, with fewer being sexually active or having multiple partners.⁵¹ Yet at least two-thirds of those who were sexually active did not use condoms consistently and a fifth reported being pregnant or making someone pregnant. The new HIV-testing campaign is encouraging, but testing needs to be clearly linked to a broader prevention programme that empowers men and women, young and old, to make positive choices.

Unsafe sex should be viewed in the context of violence against women and children. In 2000, violence and injury were the second leading cause of death in South Africa.⁵² These high death rates are fuelled by interpersonal and gender-based violence. While young men (aged 15 – 29 years) are the main victims and perpetrators, at least half of female homicide victims were killed by their intimate partners. Police dockets on rape from Gauteng province indicate that 40% of victims are children, and that most child rapes are perpetrated by men known to the child.⁵³ These patterns of violence indicate an urgent need to challenge patriarchal norms that promote risk-taking, sexual entitlement and the use of violence to control women and children.

Children rely on adults for protection; yet child abuse and neglect are rife in South Africa. This feeds an ongoing cycle of violence as children who are exposed to trauma and violence – including the inordinate use of physical punishment – are more likely to become either victims or perpetrators later in life.⁵⁴

Positive developments in the criminal justice system and improved services for victims include the Domestic Violence Act,⁵⁵ which enables access to protection orders; the Sexual Offences Act,⁵⁶ which broadens the definition of sexual assault and introduces special protection measures for children; and

the development of one-stop *Thuthuzela* care centres designed to reduce secondary trauma for rape victims, and to improve conviction rates.

The Children's Act,⁵⁷ which came into force in April 2010, provides for a range of child protection and early prevention services to support vulnerable children and families. Yet these services will be effective only if sufficient resources are allocated to address the current shortfall of social service professionals and community care workers.⁵⁸ The prohibition on corporal punishment in schools (South African Schools Act)⁵⁹ cannot on its own overcome violent disciplinary practices. School- and community-based programmes are needed to introduce positive discipline in the home and at school.

Family and community networks

Families, neighbourhoods and communities play a key role in mediating the impact of poverty, protecting children, and promoting child health. While caregiver stress, depression, alcohol abuse and domestic violence have negative impacts on child health, good interpersonal relationships help build the confidence and resilience of both caregivers and children.⁶⁰

Case 7: Local partnerships for health – The Khayelitsha Task Team

Local action is also important. Whip- and roundworm are endemic in areas with poor water and sanitation services, and primary school children are most at risk. In 1999 academics and representatives from the Departments of Health, Education, the City of Cape Town and the Khayelitsha community came together to address the high prevalence of worms at 12 primary schools. School nurses administer deworming tablets; teachers have integrated health and hygiene education into the curriculum; and environmental health officers help address problems with school sanitation as there is no point teaching children to wash their hands if there is no soap and the taps and toilets are broken.

With support from the Departments of Health and Education the project now reaches over 120 schools in the Cape Town metropole.⁷⁰ This kind of partnership is essential in addressing the social determinants of child health and should be replicated in other parts of the country.

Source: Fincham JE, Dhansay MA, Adams VJ & Mayosi BN (2005) *Synchronised and regular deworming of children and women in South Africa: Policy and practice*. Research report. Cape Town: Nutrition Intervention Research Unit, Medical Research Council.

Community- and faith-based organisations continue to play a key role in identifying and supporting children and families at risk, and more needs to be done to support community care workers (see pp. 71 – 76).

Only 35% of South Africa's children live with both parents.⁶¹ Most (75%) live with their mothers, and 60% of children do not live with their biological fathers. High unemployment makes it hard for fathers to fulfil their traditional role as providers, but men still have an important role to play and should be encouraged to participate actively in the care and protection of children.⁶²

What needs to be done to address the social determinants and improve health equity?

The current crisis in child health will affect South Africa for decades to come. It is accompanied by an enormous toll of unnecessary human suffering and death and places a massive burden on the health system. It is essential to address the underlying determinants of the crisis, which are rooted in structural inequalities and social injustice. Dealing with these problems will require concerted action from the State, corporate sector and civil society:

Provide leadership

- Strong and concerted leadership is required to reduce and eliminate inequalities in service delivery and create a healthy environment for children.
- The Presidency should place child health at the centre of the development agenda and ensure cohesive action across all sectors of government including Treasury, Social Development, Agriculture, Trade and Industry, Energy, Transport, Basic Education and Public Works.
- Paediatricians, nurses and other champions of children's rights must play an active role in advocating for greater health equity and addressing the local determinants of child health (illustrated in case 7).

Ensure health equity

- Place health equity at the heart of local government planning and ensure that Integrated Development Plans (IDPs) prioritise children's access to safe housing, water, sanitation, energy and transport.
- Invest in programmes to improve rural livelihoods, services and infrastructure.
- Ensure economic growth does not come at the expense of job creation.

- Improve birth registration and systems to ensure that social grants reach children who are most vulnerable.
- Strengthen the delivery of integrated ECD programmes for children under five.
- Prioritise diseases of poverty such as diarrhoea, pneumonia and malnutrition by strengthening the delivery of community-based primary health care services.
- Ensure that health professionals, local government officials and policy-makers are educated about children's rights, health equity and the social determinants of health.

Build partnerships

- Strengthen inter-sectoral programmes and partnerships between health, law enforcement, schools, communities and the media to reduce alcohol consumption, drug abuse and violence.

Build capacity

- Improve the quality of basic education and access to employment and social grants.
- Strengthen health promotion and prevention programmes to equip communities, caregivers and children with the knowledge, skills and resources to take responsibility for their own health and well-being.
- Ensure the active and informed participation of children and families in health care decision-making to address not just the symptoms but the underlying causes of ill-health.

Conduct research and raise awareness

- Use child-centred data to monitor health equity and evaluate progress across a range of social determinants.

Conclusion

Children are entitled to an environment that nurtures them physically, emotionally, culturally and spiritually. While the family is primarily responsible for children's growth, well-being and development, the State has a duty to provide an enabling environment.⁶³ This includes access to housing, health care and basic services as well as policies and programmes that reduce inequality and promote dignity and respect for all.

It is time to honour the spirit of the Constitution and ensure that the government, donors and civil society work together to put children first, and invest in children's health and the well-being of future generations.

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