Addressing social determinants of health in South Africa: the journey continues

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With the recent change from the Millennium Development Goals to the 17 new Sustainable Development Goals, the focus of the global development agenda is expanding: there is attention on a broader set of social determinants and, importantly, a specific sensitivity to equity, which could have a substantial effect on health. Addressing social determinants is a cornerstone in the National Department of Health's Primary Health Care Re-engineering Strategy, and an approach that is embedded in the country's National Development Plan. However, the translation of this policy commitment to programmatic action at different levels in the health system and in partnership with other sectors remains elusive.

This chapter draws on evidence collated by the World Health Organization Commission on the Social Determinants of Health, complemented with empirical evidence from South Africa to strengthen the contextual sensitivity of the analysis, in order to identify the social determinants impacting on the major components of the burden of disease in South Africa. Obesity is used as a case study to illustrate how action to address these determinants is required at different levels in the health system, and in partnership with other sectors.

The evidence is then used to interrogate the National Development Plan and the PHC Re-engineering Strategy as two major policy instruments that have the potential to address social determinants. The particular limitations of both policy initiatives are identified, and the chapter proposes how the health sector can take on a stronger advocacy role both within government and beyond to support the broader international health and development agenda.

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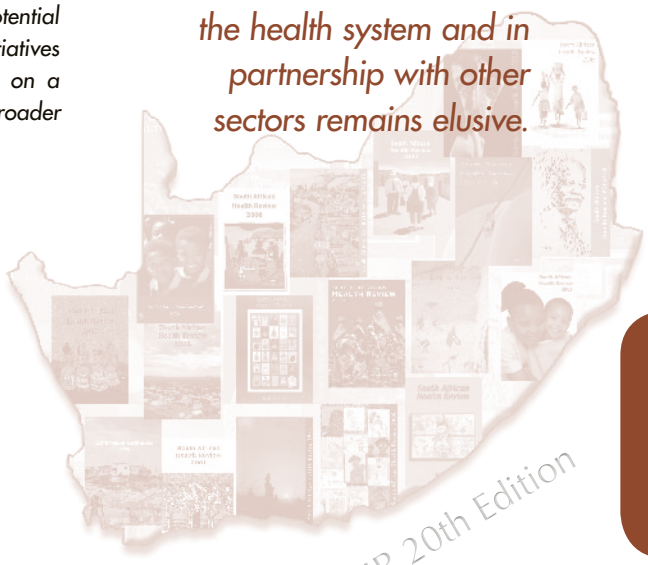

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Introduction

Two decades ago, the 1997 White Paper for the Transformation of the Health System in South Africa[1] set out a post-apartheid vision of a health system built on the primary health care (PHC) approach.[2] This commitment to PHC, which focused on social determinants, was ratified in the Health Act (61 of 2003),[3] but has proved difficult to implement.[4,5]

Meanwhile, on the global front, social determinants have risen to the forefront of the development agenda.[6] First came the United Nations Millennium Declaration in 2000. While three of the eight goals were achieved globally, progress was uneven within and across countries.[7] The United Nations Conference on Sustainable Development (also known as Rio+20) initiated an inclusive intergovernmental process with strong civil society participation which crafted the post-2015 development agenda, leading to an expanded set of 17 new Sustainable Development Goals (SDGs).[6] From the perspective of social determinants, this signalled a welcomed shift from a specific focus on health outcomes to their underlying factors – even though fundamental internal contradictions within the SDGs have been noted by some.[8] This echoes the findings and recommendations of the World Health Organization (WHO) Commission on the Social Determinants of Health[9] which, within the health field, represented a major evidence-based public shift in thinking, challenging purely biomedical notions of disease, and recognising instead the role played by global and national political economies in creating health inequities, – the "unfair and avoidable difference in health status seen within and between countries".[10]

We understand social determinants to be: "the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness".[10] We also differentiate between the socio-economic living and working conditions (societal factors) and the structural factors that shape the economic and social environments at both national and supranational levels. These include, but are not limited to, economic and social policies: legislation, labour and industrial policies, terms of trade and investment, development assistance, and conditionalities imposed by external financial institutions in relation to debt and loans. These economic and social policies are in turn strongly influenced by political power and control over decision-making structures and institutions at both local and global levels.[11]

Within the current South African context, a focus on social determinants remains high on the health agenda. South Africa exemplifies stark social inequities, which translate into a high burden of premature mortality, and marked health inequities. For example, estimates of the infant mortality rate (IMR) from the 2011 Census in the predominantly rural Eastern Cape Province is 40.3 per 1 000 live births – double that of the Western Cape with an IMR of 20.4 per 1 000 live births.[12] There are also significant differences within provinces. For example, the maternal mortality in facility ratio is 56 per 100 000 live births in urban Cape Town and 371 per 100 000 live births in the rural district of the Central Karoo in the same province.[12]

Addressing social determinants is a cornerstone in the National Department of Health's PHC Re-engineering Strategy.[5] The question is how to translate this commitment to addressing social determinants into a programme of implementable action across levels of the health system and in co-ordination with other sectors. In this chapter we describe the methods and conceptual framework used to assemble evidence of the key social determinants driving the burden of disease in South Africa, and the evidence of action to address these determinants. We use this evidence to interrogate the National Development Plan (NDP) and the PHC Re-engineering Strategy as two major policies that have the potential to address social determinants, both across sectors and within the health sector. Finally, opportunities to strengthen action on the social determinants of health in South African policy and programme implementation are explored.

Methods

Drawing on existing literature, we analysed the underlying causes of the major burden of disease in South Africa. South Africa faces a quadruple burden of disease, with major HIV and tuberculosis (TB) epidemics, maternal and child mortality levels that are higher than the global average, a growing prevalence of non-communicable diseases (NCDs), and high levels of violence and injuries. This is reflected in the leading causes of premature mortality listed in Table 1.[12] Much of this premature mortality is preventable.

Table 1: Leading causes of all-age premature mortality in South Africa, 2013

Cause of all-age premature mortality	Percentage
HIV and AIDS	15.5
TB	12.4
Lower respiratory infections	8.3
Diarrhoeal diseases	5.7
Cerebrovascular disease	4.6
Hypertensive heart disease	3.3
Ischaemic heart disease	3.3
Diabetes mellitus	2.8
Road injuries	2.6

Source: Massyn et al., 2015.[12]

We clustered health problems, as in the Priority Public Health Conditions Knowledge Network of the WHO Commission on Social Determinants of CSDH[13] and selected three categories of problems that represent most of South Africa's burden of disease: childhood illnesses; NCDs (cerebrovascular disease, hypertension, ischaemic heart disease and diabetes); and HIV. We acknowledge the limitation of omitting violence and injury. We drew from the evidence in the WHO CSDH to identify the major social determinants impacting on these three selected categories, and complemented this with empirical evidence from South Africa.

Next, taking obesity as one example of an important factor contributing to NCDs in South Africa,[14] we consulted the literature to identify recommended action required at different levels in the health system, and in partnership with other sectors. The risk of illness increases with modest increases in weight, starting from a body mass index (BMI) of about 21 kg/m^2.[15] The enormity of the problem in South Africa is evident in the results of the 2012 South African National Health and Nutrition Examination Survey

(SANHANES–1),[16] with 31% of men and 64% of women falling into the overweight or obese categories (BMI 25 kg/m^2 or more). In the context of the PHC Re-engineering Strategy, we considered what this would mean for practice in the field, including the human-resource skills mix and supervision needed, and the health-system development required. Finally, looking beyond the health sector to national policy concerning other sectors that influence health, we considered the implications for the NDP,[17] which has the potential to address social determinants by 2030.

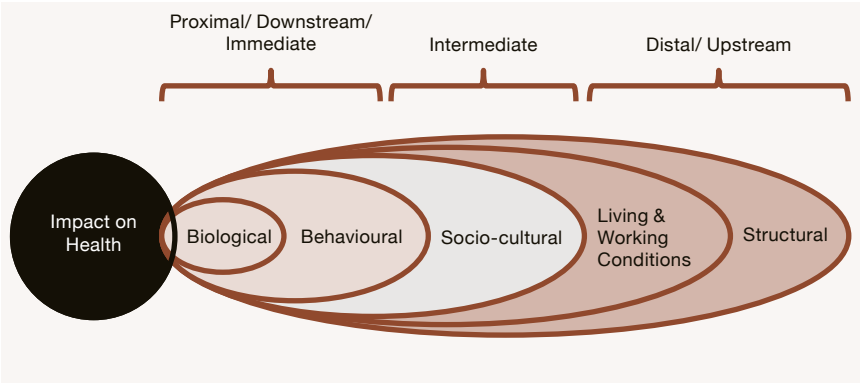
The analysis used a framework adapted from the Western Cape Burden of Disease Reduction Project[18] as shown in Figure 1, which represents the social determinants of health as distal or upstream factors influencing health. In addition to the social determinants, there are also the biological and behavioural factors, which in various other frameworks[19,20] are called proximal, downstream or immediate. We have included a category of socio-cultural factors, which are intermediate between behavioural and societal factors.

We concur with Krieger[21] that these terms do not imply a spatiotemporal distribution of causes. People who live in poverty experience the reality and consequences of poverty directly and immediately. Rather, the terms (distal/proximal and downstream/upstream) relate to different levels of causation which comprise different orders of hierarchically linked systems and processes that impact on health. Krieger reminds us that "all levels co-occur simultaneously, even though some levels may be more causally relevant than others to phenomena occurring at any given level". She further notes that class, race and gender compound inequity at every level. This is particularly relevant in the South African context, with geographical location (specifically the urban/rural divide) being another dimension.[22] Krieger also proposes that a conceptual understanding of the impact of social determinants should incorporate a life-course model as the impact of each level manifests differently, starting in utero, through infancy and all life stages, to old age. This model has been found to be helpful in designing maternal, child and newborn health programmes.[23] It is driven by the idea that the health of individuals and populations is influenced by an interaction between determinants at different levels, and that their timing and sequencing during the life course is critical.[24] While Krieger is critical of the proximal and distal framework, suggesting that it can create a split focus of accountability, we find it conceptually useful in challenging the biomedical paradigm to look beyond the individual to a broader understanding of the political economy of health, and have therefore adopted these terms in this chapter.

Findings: Unpacking the determinants of ill-health driving the burden of disease in South Africa

Tables 2–4 show the results of the analysis of the determinants of ill-health based on the application of our conceptual framework; the spread of factors is shown for each health problem across a range of upstream and downstream determinants. While medical services are important in preventing and treating the more proximal factors, there is a clear need for broader complementary interventions to address intermediate and distal factors. As the analysis moves beyond the proximal factors, the tables show that there is a confluence of a small number of social determinants of the main causes of premature mortality in South Africa: poor housing, inadequate water and sanitation, a sub-optimal food environment, high levels of alcohol and substance abuse, low levels of social cohesion, and inadequate health-system response across the three clusters. This has important implications as, in addition to health programme-specific responses, it suggests a need for an overarching plan that appreciates the synergies possible in addressing the social determinants. Furthermore, the social determinants operate at different levels (global, national, sector-specific, and local). This suggests that a set of different actions, operating at different levels, is required to address the social determinants.

Figure 1: Framework of determinants of health



Source: Adapted from the Western Cape Burden of Disease Study, 2007.[18]

Table 2: Major determinants of child ill-health in South Africa, 2017[25–33]

Proximal – downstream – immediate	
Co-morbidities	Low birth weight, under-nutrition and HIV infection lead to impaired immunity Maternal malnutrition, HIV-positive status, depression Smoking tobacco and other substances and/or drinking alcohol during pregnancy Infectious disease
Behavioural	Lack of exclusive breastfeeding and poor complementary feeding Poor hand-washing before preparation of food and after defaecation Insufficient recognition of severity of illness and care-seeking Late access to ANC (and resultant late diagnosis of preventable or manageable conditions) and poor access to nutritional support and PMTCT
Socio – cultural – intermediate	Lack of appropriate health education for caregivers – particularly in low socio-economic environments Women's decision-making power and access to resources is limited.
Distal – upstream – social determinants	
Living and working conditions	Household food insecurity Inadequate drinking water and/or sanitation facilities Overcrowding and poorly ventilated structures Poor quality of early childhood care and education Lack of community safety and security resulting in physical, sexual and emotional violence and neglect Barriers to accessing effective, quality health services (including ante- and postnatal care, immunisation, growth monitoring and IMCI) and other essential child protection services Poor maternal education Low levels of income
Structural	Inadequate collaborative institutional and governance arrangements between health and other sectors to support the implementation of the country's progressive child development and protection statutory frameworks Neo-liberal policies resulting in the reduction of social provisioning Inequity in political power and resource distribution

Table 3: Major determinants of diet-related non-communicable disease (hypertension, diabetes and cerebrovascular disease) in the South African disease profile, 2017[34–46]

Proximal – downstream – immediate	
Host	Genes Age Thrifty phenotype hypothesis
Co-morbidities	Obesity Increased abdominal girth Hypertension
Behavioural	Tobacco use Physical inactivity Diet high in sugar, salt and fat Excessive alcohol consumption Limited health education and behaviour change communication about a healthy and varied died and reducing (for example) the salt content of food
Socio – cultural – intermediate	Social exclusion and lack of social support Perceived lack of control and inequity Cultural perceptions about body size and fear of becoming thin and being identified as HIV-positive
Distal – upstream – social determinants	
Living and working conditions	Decreased opportunity to exercise in urban settings Local food environment provides limited access to healthy foods at affordable prices Visible marketing of fast-food products (including sugar-sweetened beverages) and advertising of fast-food outlets predominate over information on a healthy diet in the media. Inequitable access to effective, quality and comprehensive health services (that includes a focus on health promotion, disease prevention and referral for curative care, i.e. an integrated approach to the management of NCDs and other chronic conditions) School-procurement policies and worksite wellness programmes do not include a focus on healthy eating. Occupation Literacy

Structural	Accelerated urbanisation
	Policy contradictions between national health policies on NCDs and national trade and investment policies – with the latter promoting the influx of large amounts of processed foods and sugary beverages
	Unregulated promotional marketing of unhealthy products by transnational corporations
	Inadequate regulations in relation to standardised nutritional labelling required on food and drink products
	Although imminent, there has to date (February 2017) been no taxation on sugar-sweetened beverages.
	'Big food' (i.e. the large commercial entities) dominate the food and beverage environment.
	Trade liberalisation and neoliberal policies lead to job insecurity, and loss of social security leading to stress.

Table 4: Major determinants of HIV in young girls and women in South Africa, 2017[47–61]

Proximal – downstream – immediate	
Host	Biological vulnerability of (especially young) women
Co-morbidities	STIs
	People living with HIV (not on ART) at risk of TB
Behavioural	Non-use of condoms; not getting tested for HIV; non-disclosure of HIV-positive status
	Coercive and forced sex
	Alcohol and/or drug use reduces healthy decision-making
Socio – cultural – intermediate	Patriarchal gender norms and relationship power inequity (including child marriage) reduce the agency of young girls and women to negotiate safer sex
	Cultural beliefs around MMC
	Age-disparate and intergenerational sexual coupling between young women and older men
	HIV-related stigma prevents people living with HIV from accessing health services
	Multiple concurrent sexual partners
Distal – upstream – social determinants	
Living and working conditions	Livelihood insecurity
	Transactional/ commercial sex
	Marginalised communities (e.g. refugees) living in a non-health enabling environment
	Public safety (e.g. on public transport) not present for girls and women. Limited access to HIV-risk reduction services and commodities (e.g. pre- and post-exposure prophylaxis, condoms and HIV testing and counselling)
Structural	Sex trafficking
	Systemic rape used as a weapon of gang warfare or conflict
	Weak legislative and justice sector responses to violence against women and girls
	Discriminatory legislation for people living with HIV
	Migrant labour systems and the enforced separation of families
	Unequal access to education and economic opportunities

Obesity as a case study: moving from determinants to action

There is now evidence that early breastfeeding contributes to reducing the propensity for adult obesity. However, this is currently not promoted effectively as an intervention, with rates of exclusive breastfeeding at six months still being extremely low.[62] In addition, the national SANHANES[16] study revealed that a high percentage of South Africans demonstrate unhealthy dietary behaviour in that they consume excessive amounts of sugar and fat. In 2010, South Africans consumed 254 Coca-Cola products per person per year, an increase from around 130 in 1992 and 175 in 1997, and compared with a worldwide average of 89 products per year. Carbonated drinks are now the third most commonly consumed food/drink item among very young urban South African children (aged 12–24 months) – less than maize meal and brewed tea, but more than milk.[63,64] A combination of local material and socio-cultural factors play a significant role in food-consumption patterns.

In addition to these socio-cultural considerations, the SANHANES study identified key influences on food-purchasing choices, with the most significant being food price. Other important factors include taste and how long the item resists spoilage. Clearly, rational economic and social considerations underpin the swing to processed and packaged foods, which contain excessive amounts of salt, fat and sugar.

Easier access to food has been facilitated in South Africa by the rapid expansion of supermarkets, which now account for an increasing proportion of food purchases.[65] Whole and fresh foods are more expensive than processed foods when compared on both a weight and an energy basis.[66] These national structural factors are shaped by neo-liberal policies, where global trade is unregulated and dominated by transnational corporations (TNCs), including in the food industry. These corporations now dominate all the nodes in the food value chain – agricultural inputs, farm production, food processing and manufacture, and retail, including in South Africa.[67] In the 1980s, TNCs expanded into the manufacture of processed foods such as snacks and soft drinks, their growth and spread being accelerated by the deregulation of investment and trade, overseen by institutions such as the International Monetary Fund, World Bank and World Trade Organization. Of the 100 governments and corporations with the highest annual revenues in 2014, 63 were corporations and 37 were governments.[68,69]

Action at global level can include:

- dissemination of positive examples of improved nutritional outcomes associated with policies such as tax on sugary drinks (Mexico)[70] and school-feeding legislation (Brazil);[71]
- support of initiatives to increase corporate taxation and regulate tax avoidance; and
- measures to raise public awareness about the increasing dominance and unaccountability of TNCs and their associated detrimental impacts on health.

Action at national level can include:

- fiscal measures (e.g. tax on sugary beverages);[72]
- food labelling and regulation of food advertising;
- policy congruence between ministries (e.g. healthy food options and information, education and communication, information, education and communication, physical activity possibilities in schools, supported by the Department of Health;[73] and
- health education/mass media.[74]

Action at local level can include:

- urban planning (e.g. recreational spaces[73] and retail environments;[65]
- support of early childhood feeding practices[75] and household food gardens; and
- school and workplace nutritional interventions.

This case study shows that a social-determinant approach to a health problem such as obesity reveals a set of contributing factors beyond those acting at the immediate level of the individual (i.e. in the case of obesity, beyond dietary choices). A social-determinant approach draws attention to population and community-level factors, such as socio-cultural influences and the food environment created by both local and global factors. This wider analytical lens is necessary to begin planning a coherent programme of action that works across levels to promote health. This case study further illustrates how different actions are required at global, national and local levels, and how a range of actors at each level have specific sets of responsibilities. Such terms as 'inter-sectoral action' and 'health in all policies' denote such activities.

Evaluating how the NDP promotes a social-determinant approach

The NDP[17] aims to eliminate poverty and reduce inequality by 2030. Its vision is to raise the living standard of all South Africans to a minimum level. It was developed by a presidentially appointed National Planning Commission, which conducted a diagnostic assessment, and then consulted widely through public fora as well as in meetings with Parliament, the judiciary, national and provincial departments, local government and other stakeholders. The NDP sees national development as a non-linear process requiring a multidimensional framework, which requires "a combination of increasing employment, higher incomes through productivity growth, a social wage and good quality public services".[17] It thus seeks to create a virtuous cycle of growth and development.

The NDP is broadly aligned with the SDGs, and as such might seem promising in addressing the social determinants of health. The NDP chapter on health (Chapter 10) outlines support for a phased introduction of national health insurance (NHI), as well as the PHC Re-engineering Strategy. In particular, the chapter promotes a much stronger focus on community health workers (CHWs); it is suggested that CHWs need to be recruited in large numbers and trained to perform a wider range of tasks, thus forming the base of the health pyramid. In addition to rendering health care more accessible and equitable, this PHC system will create more jobs and indirectly improve health by reducing the prevalence and depth of poverty.[17] The chapter acknowledges the roles of other sectors but, as shown in Box 1, it tends to focus on proximal factors and the immediate environment when listing the priority interventions – associated with the social determinants of health – that are required to achieve the health goals of the NDP's 2030 vision.

Box 1: Proposed interventions to address the social determinants of health, South African National Development Plan 2030

Implement a comprehensive approach to early life by developing and expanding existing child-survival programmes
Collaborate across sectors to ensure that the design of other sectoral policies take impact on health into account
Promote healthy diet and physical activity, particularly in the school setting

Source: National Planning Commission,2011.[16]

The NDP has the potential to address social determinants; however, apart from the proposal to increase employment of CHWs, little thought is given in the NDP to how *different sectors* can work together to produce positive health outcomes. Nor is attention given to how *different spheres of government* can work together – connecting action *across both levels and sectors*. Some social determinants are the remit of local government (water, sanitation), some are provincial responsibilities (basic education, school nutrition programme), and others are national responsibilities (higher education and trade). The lack of clarity on relationships and alignments between sectors undermines the potential for co-ordinated action and advocacy at different levels. It jeopardises the training of health workers required to implement the PHC Re-engineering Strategy, where demand is in the health sector but supply falls under education.

Notwithstanding its noble aims, the NDP is ultimately underpinned by a neo-liberal agenda that could plausibly undermine its sectoral aims. The NDP seeks to reposition South Africa so as to benefit from what it understands to be major shifts in global trade and investment that are reshaping the world economy and international politics. Indeed, opportunity is linked to the expectation that, within the next decade, Africa will be the only low-wage region. The success of the plan is dependent on whether the intention to triple the size of the economy by 2030 can be realised. Some fear that export-led growth, i.e. economic growth based primarily on the extraction and export of raw materials such as minerals and agricultural products, will drive unemployment, limit the social agenda and undermine decent work, including in health. Another aspect of the neo-liberal agenda is a reduction in government spending, currently evident in the growing austerity measures imposed on the health sector.[76]

Evaluating how the PHC Re-engineering Strategy promotes a social-determinant approach

A 'four-stream' approach to PHC re-engineering has been adopted by the National Department of Health (NDoH), with a commitment to the district health system as the institutional vehicle to manage implementation. The four streams are: a system of community outreach referred to as Ward-based Outreach Teams (WBOTs); School Health Teams; District Clinical Specialist Teams (focused on maternal and child health); and contracting of private general practitioners for clinical care. Of the four streams, the WBOTs and School Health Teams are best placed to begin addressing the social determinants of health.

When fully implemented, each of the 4 277 electoral wards in the country should have one or more WBOTs, comprising a professional nurse (as team leader) and six CHWs, with additional support from Environmental Health and health-promotion practitioners. The main function of WBOTs is to promote good health and prevent ill health. In fulfilling this mandate, WBOTs in a number of provinces have engaged other sectors such as Social Development, the Social Security Agency of South Africa (SASSA) and the Department of Home Affairs around access to social grants; they have also participated in inter-sectoral 'war rooms' at community level, and have worked closely with local political structures. Notwithstanding these actions, training and scope of practice to date have not focused on sensitisation to social determinants or the development of skills required for community mobilisation.[77] In practice, the work of WBOTs is centred on household follow-up and support, rather than community-level action. There is considerable potential for WBOTs to further promote local action on the social determinants of health – whether in food environments, pedestrian safety, or access to services from other sectors (such as policing, grants, health promotion at schools, etc.) However, in order to achieve this, the value of such roles must be recognised, and they must be actively supported through appropriate training and remuneration.

School Health services are the second stream of PHC re-engineering, and are enabled by an Integrated School Health Policy.[78] With the services starting in schools in quintiles 1 and 2 (the poorest schools), they are wellplaced to mitigate poverty and its sequelae. Frameworks from the Department of Basic Education on comprehensive learner support provide the potential to work intersectorally with educators, schoolchildren, parent bodies, various government sectors and local communities in addressing social determinants.[78] However, establishment of School Health Teams has been slow and the programmatic focus is severely limited, with screening of learners occurring only at key times (e.g. developmental screening in grades R and 1). Sexual and reproductive health education to supplement the life-skills programme is one service that has been prioritised; this is a proximal behavioural intervention that should be supported by more holistic youth-empowerment programmes.

In sum, although the PHC Re-engineering Strategy importantly focuses on the use of CHWs organised in WBOTs and School Health services, it is weak in terms of its approach to community involvement, civic engagement and inter-sectoral collaboration. It also does not sufficiently recognise the crucial nature of a developmental approach to deal with issues relating to the social determinants, either within the health sector (for example, by linking to the work of environmental health practitioners who represent an important interface with communities, and who are wellplaced to address selected social determinants such as water, sanitation, storm-water drainage and dumping at a local level),[77] or in other sectors.

Where to in the next 20 years?

South Africa has a clear commitment to address social determinants; the challenge is to move into action. Looking forward 20 years takes us beyond the current NDP vision for 2030. While the NDP offers some possibilities to address social determinants, it unlikely to succeed if the growth required to raise employment and generate funds to fuel improvements in living standards is not achieved. We therefore need to reassess the reality of year-on-year less-than-expected-growth, which has been a feature of our economy for the last decade,[78] and to think about how different sectors will work together.

Also, clearly within its remit, the NDoH must re-examine the PHC Re-engineering Strategy. While the current strategy provides the possibility for local action to address social determinants, there has not been sufficient attention to, and investment in, building the human-resource capacity needed at this level. WBOTs, School Health Teams and specialist teams must be fully staffed. The work of addressing social determinants cannot be left to CHWs alone; all health-worker cadres at PHC level should receive training in order to understand a social-determinant approach and to build the skills required for advocacy and meaningful and effective inter-sectoral engagement. In particular, WBOTs should link at sub-district level with Environmental Health practitioners who fall under local government and who are responsible for environmental health; they also should link with the Department of Social Development which is responsible for social welfare and support. Equally of concern is the inability of the current the PHC Re-engineering Strategy to initiate the sort of national-level action that is required by health and other sectors. In the era of globalisation, policy-level national action is required to address social determinants, in addition to local action. As shown in the case study presented on obesity, a range of fiscal and legislative measures are needed to regulate the food trade, for example. In this regard, it is encouraging that a National Health Commission is planned that will have responsibility for developing a 'Health-in-all-Policies' strategy. There is also a role for the use of mass media to raise awareness in the population of the role of key social determinants of health. An aware and engaged citizenry is crucial to both the improvement of health behaviours, and to influence government to protect and promote health through the introduction and strengthening of fiscal, developmental and regulatory policies concerning the food environment, living and working environments and social-support structures. Finally, there is a need for action at global level, also beyond the remit of local health provision, to call transnational companies to account. Here again, the health sector has to find its voice and take on a stronger advocacy role within national government and beyond, if it is truly to join the struggle to address the social determinants of health.

Recommendations

Building on the principles and potential of the country's NDP and the PHC Re-engineering Strategy, we recommend that action on the social determinants of health in South African should be strengthened as follows:

Firstly, a social-determinant approach should be used as an analytical lens to understand population- and community-level factors that influence health.

Secondly, an overarching plan should be constructed that highlights and addresses the social determinants of health common to the main causes of premature mortality in South Africa: poor housing, inadequate water and sanitation, a suboptimal food environment, high levels of alcohol and substance abuse, low levels of social cohesion, and an inadequate health-system response.

Thirdly, greater dialogue should be initiated between sectors and, importantly, how different ministries can realistically work together and how action can be aligned and connected across levels of government and across sectors. This requires attention to organisational structures, processes and relationships that ensure alignment of planning and implementation across levels of government and between sectors, ministries and departments.

In this regard, greater consideration should be given to how such action can be taken both at national level (for example, in considering how fiscal measures can be established to address the negative consequence of globalisation), and at local level (for example, by considering how communities can be involved in determining how local resources are used for the 'common good' to improve health).

Lastly, it is recommended that the PHC Re-engineering Strategy be re-examined so that it makes provision for funding, processes and structures that can support active collaboration and action across sectors – with the active engagement of civil society – to extend the current, somewhat limited, policy and programmatic practice associated with inter-sectoral action for health. In this regard, links are needed urgently between the 'four streams' of the PHC Re-engineering Strategy at sub-district level and other stakeholders, such as Environmental Health practitioners and front-line staff employed by other ministries in the government's Social Protection, Community and Human Development cluster (such as Social Development, Water and Sanitation, and Human Settlements).

Related to this, there should be growing recognition within the NDoH and allied ministries that the work of addressing the social determinants of health cannot be left to the CHWs alone – as is currently suggested in the NDP. What is required instead is the training of all cadres, particularly those working at a primary level of care, or at first point of contact with citizens in the context of other ministries and departments, so that there is a greater understanding within the civil service of what is required for advocacy and effective inter-sectoral engagement.

The NDoH can exercise leadership by playing an advocacy and educational role in this regard as it has clearly articulated understandings of the inter-sectoral nature of the social determinants of health, as well as evidence of the sort of action across levels and sectors that is required to promote health and well-being.

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