FEATURE

Public Policy as an Effective Intervention against Malnutrition in South Africa: A Focus on Obesity

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Introduction

The right to health is best understood through an intersectional lens. This can be seen in General Comment 14 of the Committee on Economic, Social and Cultural Rights, based on article 12 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), which South Africa has ratified and is a signatory to. General Comment 14 states, in paragraph 4, that the right to health

> *"embraces a wide range of socio-economic factors that promote conditions in which people can lead a healthy life, and extends to the underlying determinants of health, such as food and nutrition, housing, access to safe and potable water and adequate sanitation, safe and healthy working conditions, and a healthy environment."*

Therefore, the intersection between the right to food, nutrition and health extends to socio-economic factors, which can aid legal strategies. In other words, with increased scope for legal intervention, malnutrition can be improved at an increased rate.

Statistics

The 2021 Lancet series, 'Maternal and Child Undernutrition', specifically the sub-theme, 'Mobilising evidence, data, and resources to achieve global maternal and child undernutrition targets and the Sustainable Development Goals: An agenda for action' provides insight into rates of maternal and child undernutrition in low- and middle-income countries (Black et al 2021 1). It was noted that these countries had slowly declining rates of undernutrition.

Recent data by the South African Child Gauge 2024 indicates that increased interventions are necessary (Hall, K. et al., 2024, 6). According to the Child Gauge, the statistics of stunted children under 5 years old was 27.7 per cent in 2016, which increased to 28.8 per cent in 2022. This remains the most common form of malnutrition. The 2016–2022 percentage change is an increase of 5.1 per cent. The proportion of children in South Africa under the age of 5 years who were overweight was 13.3 per cent in 2016 but 22.6 per cent in 2022, a 9.3 per cent increase.

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Wasting, which appears as severe acute malnutrition, has seen a 33 per cent nationwide increase between 2020/2021 and 2021/2022, which climbed a further 20 per cent between 2021/2022 and 2022/2023. In 2022/2023, a worrying number of children – 15,000 – had to be hospitalised due to severe acute malnutrition.

Child and adolescent obesity are also rising in low- and middle-income countries, according to 'Child and adolescent obesity' (N Lister et al 2023 1). The effects of this were seen during the COVID-19 pandemic, when children and adolescents with obesity experienced the virus more severely, meaning that hospitalisation was required, sometimes to the point of mechanical ventilation. The report highlights the prevalence of paediatric overweight and obesity, noting that boys in South Africa fall within the 15-<22.5 per cent category and girls, in the 22.5-<30 per cent category of both overweight and obesity.

These statistics are alarming, especially in light of the Global Nutrition Targets for 2025. These targets were set in 2012 by the World Health Assembly and are made up of six points: (1.) Achieve a 40 per cent reduction in the number of children under 5 who are stunted. (2.) Achieve a 50 per cent reduction of anaemia in women of reproductive age. (3.) Achieve a 30 per cent reduction in low birth weight. (4.) Ensure that there is no increase in childhood overweight. (5.) Increase the rate of exclusive breastfeeding in the first six months up to at least 50 per cent. (6.) Reduce and maintain childhood wasting to less than 5 per cent.

It was noted in a 2014 policy brief series – that is, a decade ago – 'the world was off-track to meet all six of the World Health Assembly global nutrition targets'; in 2019, only '106 out of 109' countries were 'on track to reach one of the nine World Health Assembly 2025 nutrition targets' (WHO, 2014, 1). South Africa is still off-track to meet the targets, specifically target 4, where there has been a 9.3 per cent increase in childhood obesity.

Therefore, obesity, with a 9.3% increase in children under 5 years of age with weight-for-height above two standard deviations from 2016 to 2022, presents as a form of malnutrition that is in dire need of change. This need for change has two prongs. The first is regarding the constitutional right to health, food, and nutrition of the children impacted by this. The second stems from South Africa's international obligations. The latter relates to target 4 of the 2025 Nutrition Targets. Action must be taken with short- and long-term effects. Consequently, this article discusses six possible courses of action.

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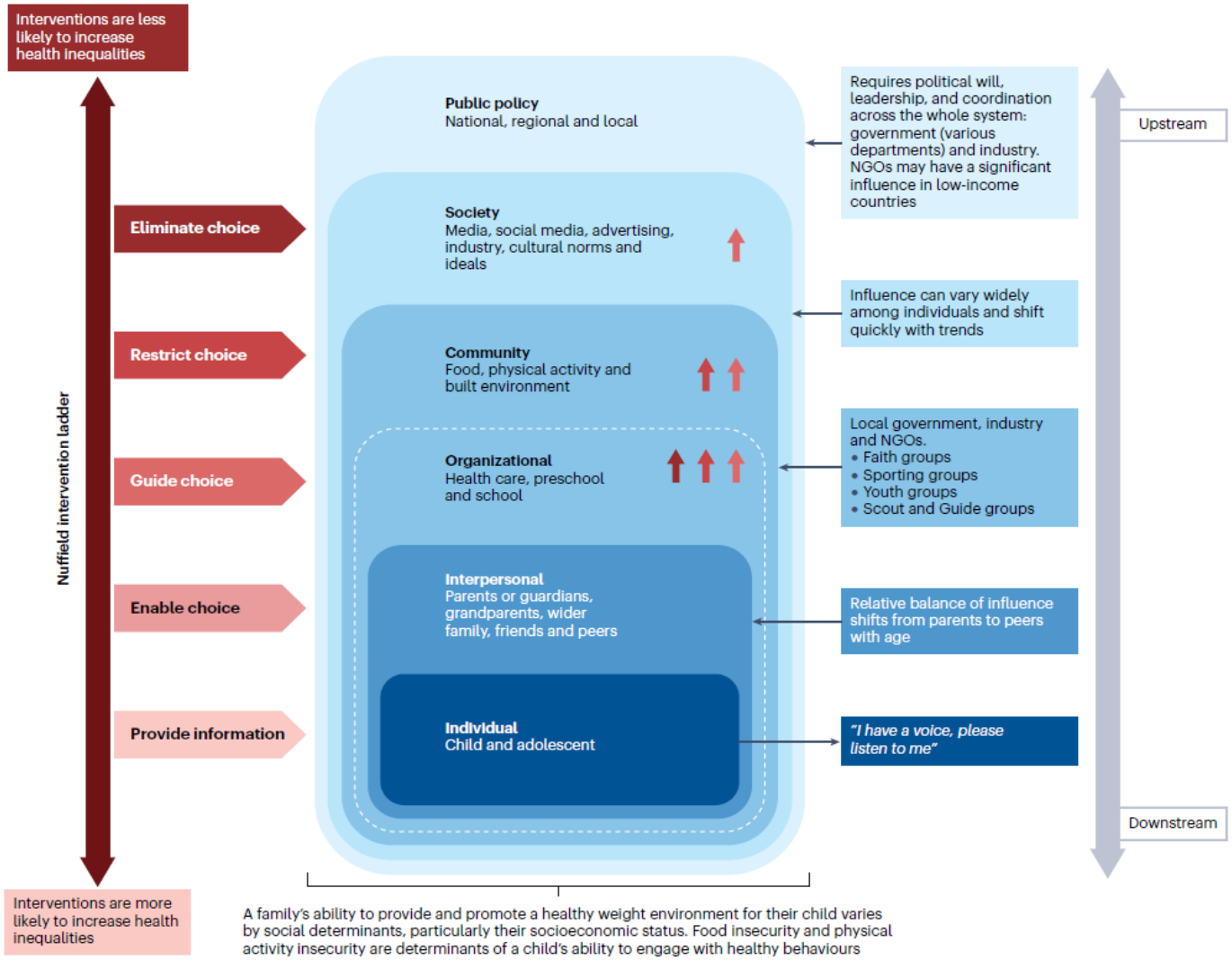
Why policy development and change?

Lister et al, in 'Child and adolescent obesity' went on to explain a scale of which interventions are less likely to increase health inequalities. This scale is known as the 'Nuffield intervention ladder' (Lister et al, 2023,10). At the bottom of the scale working upwards, meaning the intervention that has the most gaps which can lead to health inequalities is providing information at the individual level, followed by enabling choice at an interpersonal level. This is followed by guiding choices at an organisational level, then by restricting choice on a community level, which is followed by eliminating choice on a societal level. The intervention which has the least gaps and is, therefore, least likely to increase health inequalities is public policy action taken at all levels. Therefore, policy development is the most effective strategy in terms of interventions due to its potential to reduce health inequalities.



Source: Lister, N. et al. (2023): 10

Education

Due to the intersectional nature of the right to food and health, one of the interventions that can be utilised is education. This is discussed in multiple academic articles, one being 'Maternal and Child Nutrition' (Black et al, 2013, 1). This article series has a sub-discussion of nutrition-specific and -sensitive interventions and programmes. The latter can be understood as 'interventions or programmes that address the immediate determinants of foetal and child nutrition and development' (Black et al, 2013, 3).

Specific qualities of interventions or programmes are 'adequate food and nutrient intake, feeding, caregiving and parenting practices and low burden of infectious diseases' (Black et al, 2013, 3). Nutrition-sensitive interventions and programmes can be understood to be 'interventions or programmes that address the underlying determinants of foetal and child nutrition and development and incorporate nutrition-specific goals and actions' (Black et al, 2013, 3). These interventions and programmes typically address 'food security, adequate caregiving resources at maternal, household and community levels, and access to health services and a safe and hygienic environment' (Black et al, 2013, 3).

These types of programmes 'can serve as delivery platforms for nutrition-specific interventions, potentially increasing their scale, coverage and effectiveness'. Examples of nutrition-sensitive interventions and programmes include early child

development, maternal mental health, schooling, social safety nets, agriculture and food security and health and family planning services.

The Lancet series shows that one of the interventions used to decrease obesity and non-communicable diseases (NCDs) is a nutrition-sensitive approach to classroom education. Similarly, The Child Gauge noted that 'the responsibility for coordinating early childhood development (ECD) falls under the leadership of the Department of Basic Education (DBE)'. This intervention can be implemented through legal strategies due to the DBE's mandate to develop and oversee basic education in government schools. For instance, through the development of different policies and programmes such as the National School Nutrition Programme (NSNP).

The 2021 Lancet series on 'Maternal and Child Undernutrition' (Black et al, 2021, 1) provides a more systematic review as it is focused on interventions in the first 1,000 days of life and found the following regarding different types of interventions, which are mostly health system dependant. If these health system interventions were 'scaled to 90% coverage in 34 high-burden countries, [they] could potentially reduce child mortality by 15% and stunting by about 20%'.

The systematic reports also found that community-based delivery channels, specifically nutrition education and counselling, 'are used to extend the reach, intensity and effects of nutrition interventions' (Black et al, 2021, 1). Additionally, it was found that combining different interventions produced better results. This was seen when 'combining home visits' with 'trained community health workers or peer counsellors' and mothers, which improved infant and young child feeding practices, with 'mother peer groups' serving as 'an even more effective approach'. This method was seen again when using 'mass media and mobile technologies' for nutrition messages. The approach here was able to 'directly reach target audiences and support front-line workers' (Black et al, 2021, 1). However, when exposure was combined with other consistent messages 'through mass media, interpersonal counselling and community engagement', improved feeding practices were noticeable (Black et al, 2021, 1).

Mental health intervention

Another intersectional intervention suggested by the Child Gauge is parental mental health care. Notably, this same mental health intervention is seen in the nutrition-sensitive interventions and programmes discussed in the 2021 Lancet series on maternal and child nutrition. This stems from the common societal practice of women being responsible for what the household eats, especially the nutritional intake of children. Women generally prepare household meals and often have to make difficult choices between buying food that is nutritious and affordable.

The matter was discussed in the 2017 Nutrition and Food Systems document detailing a report by the High-Level Panel of Experts (HLPE) on food security and nutrition (HLPE, 2017, 79). In the Child Gauge, this mental-health effect is discussed in terms of specific consequences for the health of the child (Hall et al, 2024, 39). It is stated that 'perinatal depression and anxiety can have intergenerational ramifications associated with, among other things, pre-term birth, low birth weight, malnutrition and suicide' (Hall et al, 2024, 39).

Action taken to develop mental health can be seen in legal and policy developments. Examples vary from including routine screening into mandates to dismantling barriers such as combatting underfunding and staff shortages. Interestingly, a vulnerable group within this focus on mental health among parents are teenagers, due to the increased anxiety of early pregnancy. The Child Gauge suggests 'differentiating' mental health support 'to cater to these needs' (Hall et al, 2024, 39). Therefore, due to the wide scope of impact that parental mental health has on the child, the solutions vary and include those falling outside the exclusive category of the right to adequate food. This was espoused in the report by the HLPE on food security and nutrition. The report mentions that 'the set of policies to promote the right to adequate food for women is far beyond measures of access to health care and food'.

The report notes that although access to health care and food is important, the vulnerability of parents' mental health, specifically mothers', stems from gender

discrimination and the lack of equality in what each parent is societally expected to provide in the familial structure. The report therefore 'calls for actions to promote progress in removing all discriminatory provisions in the law' (HLPE, 2017, 79).

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Nutrition-specific interventions

Nutrition-specific interventions, as discussed above, were identified in the 'Executive Summary of the Lancet Maternal and Child Nutrition Series' (Black et al, 2013, 3). They include:

> Adolescent health and preconception nutrition, maternal dietary supplementation, micronutrient supplementation or fortification, breastfeeding and complementary feeding, dietary supplementation for children, dietary diversification, feeding behaviours and stimulation, treatment of severe acute malnutrition, disease prevention and management and nutrition interventions in emergencies.

The series explains how to build an enabling environment through different facets such as politics, governance, leadership, financial resources, and broader social, economic, political and environmental contexts nationally and globally. Examples of how to create enabling environments include using mechanisms such as food security, economic access, food utilisation, feeding and caregiving resources, and access to and use of health services as well as hygienic environments.

Obesity-specific interventions

Lister et al in the Nature Reviews publication explain that the treatment of obesity 'include[s] management of obesity-associated complications, a developmentally sensitive approach, family engagement, and support for long-term behaviour changes in diet, physical activity, sedentary behaviours and sleep' (Lister et al, 2023, 2). These need to be considered when discussing policy interventions regarding obesity. Obesity prevention also 'requires a whole-system approach, with policies across all government and community sectors systematically taking health into account, avoiding harmful health impacts and decreasing inequity' (Lister et al, 2023, 2).

Additionally, it is noted that specific early nutritional factors affect later childhood obesity. This can be seen, for example, in the association between a 'lower protein content in formula food' and 'longer breastfeeding' periods with a lower risk of childhood obesity (Lister et al, 2023, 4). These scientific links also build the foundation of educational intervention policies being used to spread information to empower people to act.

The link between obesity-specific and education interventions is discussed in the Department of Health's Strategy for the Prevention and Management of Obesity in South Africa 2023-2028 (Department of Health, 2023, 22). This strategy highlights the impact of education interventions on the later life choices and actions of relevant persons (Department of Health, 2023, 22). Specifically, healthcare expenditure is used as an example in the Strategy (Department of Health, 2023, 22).

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Multisectoral intervention

Multisectoral coordination is needed in short- and long-term plans for combatting malnutrition, including obesity and overweight. Report number 12 by the HLPE on food security and nutrition notes that 'governments must play a strong role in reshaping food systems' and 'need to be capable of coordinating policy interventions across sectors to deal with the multiple causes and consequences of malnutrition' (HLPE, 2017, 114).

This report suggests that at a national level, the government needs to establish a mechanism whereby ministries can work together to achieve sustainable food systems that support nutrition-specific interventions. The suggested mechanism is endorsed by the highest political body in a state and founded on 'effective participation of a range of stakeholders'; examples of stakeholders include United Nations organisations, funding coordinators, and researchers. Gillespie, one of the contributors to the HLPE, provided the foundation for this mechanism when it was explained that 'sometimes, the number of agencies, actors, and sectors involved in addressing the problem leads to unnecessary competition' (HLPE, 2017, 114). Therefore, removing the competitive approach between these stakeholders and utilising a team-based approach is more likely to create positive outputs (HLPE, 2017, 114).

However, this top-down approach generally negates vulnerable and marginalised populations. This means that for this approach to create positive outputs, power within the food system must be balanced to provide the foundation for effective teamwork. As such, the recommendation includes farmers, relevant local community leaders, and representatives of marginalised groups as part of the 'stakeholder' category.

Conclusion

The findings from the above analysis are that different interventions are available, such as policies, education, mental health action, nutrition-specific interventions, obesity-specific interventions, and multisectoral interventions. Policies, however, are explained to be the most effective intervention within the Nuffield intervention ladder. Notably, the other interventions should not be negated but rather used concurrently with policy development. Furthermore, intersectional considerations were highlighted when looking at the effectiveness of using education, policy, and obesity interventions together to combat obesity. Therefore, it can be understood that potential policy development can have a positive impact on South Africa's obesity statistics if informed by evidence-based nutrition-specific interventions.

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