

Review

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Direct Individual Support is the Missing Element in the Mainstream National Obesity Guidelines

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Review

Direct Individual Support is the Missing Element in the Mainstream National Obesity Guidelines

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Abstract

Whereas several country-level nutrition guidelines reference mechanisms like advertising, taxation and labelling, among others, as ways to promote healthy diets, there appears to be a lack of guidance on direct 'clinical' support measures to manage overweight and obesity in a contextually specific manner effectively. This report provides an overview of the existing policies and guidelines in the Southern African Development Community [SADC] countries. Overweight and obesity affect all 16 SADC countries across all age groups, which poses an adverse effect on these countries' public health and health systems. Two appraisers used the AGREE II tool separately to appraise and analyse guidelines specifically adopted to prevent and manage overweight and obesity. African countries, especially SADC countries, have developed and implemented national strategies that emphasise multisectoral approaches, policy and legislative support, fiscal measures like Sugar Sweetened Beverages [SSB] taxes, health promotion, and education to prevent and manage obesity. These efforts align broadly with the World Health Organisation's global guidelines and aim to create enabling environments for healthier lifestyles to reduce obesity and related Non-Communicable Diseases [NCDs]. This comprehensive approach reflects recognition of obesity as a complex public health issue requiring coordinated action across sectors and levels of society.

Keywords: dult overweight and obesity; obesity guidelines; policies; Southern African Development Community Countries; ecological causes

1. Background

Obesity and overweight have become one of the most pressing global public health challenges, with more than one billion people worldwide estimated to be obese, including nearly 880 million adults and 159 million children and adolescents aged 5 to 19[1]. According to the World Obesity Federation's analysis, nearly three billion people live with overweight or obesity[1]. Based on this evidence, most people on the planet reside in nations where obesity and overweight pose a greater health risk than underweight [1]. An estimated three to seven million deaths in 2021 were attributed to noncommunicable diseases [NCDs], including cancer, diabetes, heart disease, neurological disorders, chronic respiratory conditions, and digestive disorders, as a result of having a Body Mass Index [BMI] that was higher than ideal across all age groups [2]. According to the NCD Risk Factor Collaboration [NCD-RisC], the extent of obesity was once confined mainly to high-income, industrialised countries. However, it is now a growing concern in low- and middle-income countries [3]. The key driver of this global shift is the nutrition transition, characterised by a dietary shift from traditional, nutrient-rich foods to energy-dense, processed foods [ultra processed food] which are high in sweeteners, Flavors, sugars, fats, and salts [4].

The fast urbanisation and economic expansion that many developing nations have seen in recent decades is closely related to this shift, resulting in a change in lifestyle and a decline in physical activity levels [5]. Numerous interrelated factors have contributed to the global increase in obesity and overweight. Firstly, the global availability of inexpensive, high-calorie processed foods has significantly changed diets, leading people to consume ultra-processed and hyper-palatable

foods, which provide fewer nutrients and high calories [5, 6]. Secondly, because of urbanisation and technological advancements, more people are gradually leading sedentary lives, working in offices, using motorised transportation, and being less active overall [5, 7]. Ultimately, socioeconomic factors are important; low-income populations tend to have higher obesity rates because they rely on have access to more affordable, less nutritious food as a state of survival [5, 8]. Yes, there are cheaper healthy food, however the gap relies on whether people have the knowledge to make informed decision when buying food for limited budget? The "double burden" of malnutrition, which occurs when populations experience both undernutrition and obesity at the same time, is a result of these global trends, especially in parts of Asia and Africa[5].

While obesity and overweight affect both the young and adults, each country has recorded a distinctive prevalence. Remarkably, one in eight people in the world is now living with obesity[9], highlighting the scale of this epidemic. The distribution of obesity and overweight varies dramatically across WHO regions. The Americas have the highest combined overweight and obesity rates [62.5% adults, 33.6% adolescents, and 8% children] [Table 1], followed by Europe at 59% and the Eastern Mediterranean region [46%], while the Western Pacific [25.4%], Africa [26.9%], and South-East Asia [13.7%] have comparatively lower rates [1].

As this review looks at existing strategies in SADC countries, according to the 2023 SADC Landscape Analysis on Overweight and Obesity, all 16 SADC countries are affected by overweight and obesity, with adult prevalence varying from 25% in Malawi to 55% in South Africa[10, 11]. Lesotho [40%], Eswatini [39%], Namibia [42%], Botswana [45%], South Africa [55%], Zimbabwe [39%] and Seychelles [38%] have the highest rates of adult overweight and obesity. In every SADC nation, women are more likely than men to be overweight or obese, except for South Africa, where men were marginally more likely to be overweight in 2019. Over the past 20 years, the prevalence of overweight and obesity has risen in all SADC nations [Table 1].

In addition, overweight and obesity have been seen to affect children and adolescents. In this regard, the percentage of children and adolescents [ages 5 to 19] who are overweight or obese varies by SADC country, ranging from 12% in the Democratic Republic of the Congo [DRC] to 30% in South Africa. The nations with the highest rates of overweight and obesity among children and adolescents are South Africa [30%], Botswana [20%], Eswatini [20%], Namibia [19%] and Lesotho [19%]. Although the prevalence of overweight and obesity in children under five varies from 2% in Madagascar to 12% in South Africa, it is significantly lower than in the 5–19 age group in all SADC countries. Lesotho [7%], Mauritius [7%], Botswana [12%], Seychelles [9%], Eswatini [8%] and South Africa [12%] have the highest rates of overweight and obesity among children under five [Table 1]. Moreover, overweight or obesity is more common in girls than in boys in all countries. All the SADC countries are seeing an increase in the prevalence of overweight and obesity, with South Africa, Botswana, Eswatini, Lesotho, Namibia, the Seychelles, and Zimbabwe all showing signs of rapidly spreading epidemics. The entire region can benefit from strategies to prevent overweight and obesity [10, 11]. Addressing this rising trend requires coordinated regional efforts focused on early prevention, targeted interventions, and sustained public health strategies to curb the escalating burden of overweight and obesity among children and adolescents across the SADC region.

Table 1. Prevalence of overweight and obesity among adults, children, and adolescents aged 5-19 years in SADC countries in 2019 [10]In contrast to a country with the highest* overweight and obesity rates. This review collated estimates from 15 studies using a BMI> 25 to define overweight for persons aged 10 and above. Studies have used various definitions for younger persons; thus, the WHO recommend a BMI percentile between the 85th and 95th as overweight and above the 95th percentile as obesity for children and adolescents [12].

<i>Countries</i>	<i>Adults [%]</i>	<i>Children and</i>	<i>CHILDREN</i>	<i>0-4</i>
			<i>YEARS [%]</i>	

Adolescents aged 5-19 Years

[%]

<i>Angola</i>	29	11	3.9
<i>Botswana</i>	45	18	10.1
<i>Comoros</i>	28	12	7.7
<i>DRC</i>	27	10	3.7
<i>Eswatini</i>	39	17	7.9
<i>Lesotho</i>	40	15	6.9
<i>Madagascar</i>	26	11	1.5
<i>Mozambique</i>	27	13	5.5
<i>Mauritius</i>	33	15	6.8
<i>Malawi</i>	25	11	3.9
<i>Namibia</i>	42	15	5.3
<i>Seychelles</i>	38	23	9.1
<i>Urt</i>	30	12	4.6
<i>South Africa</i>	55	25	12.1
<i>Zambia</i>	39	15	2.7
<i>Zimbabwe</i>	30	13	5.4
<i>Americas*</i>	62.5	33.6	8

2. Methodology

To effectively address the growing public health challenge of overweight and obesity, it is essential to evaluate the quality and comprehensiveness of existing national guidelines and strategies. This report reviewed existing guidelines or strategies targeting overweight and obesity prevention and management in all 16 countries using the Appraisal Guideline for Research and Evaluation [AGREE] II tool, 2021 version.

2.1. Review Sample

In preparation for a study focused on the management of obesity and overweight in South Africa, one of SADC's member countries, to understand the broader overweight and obesity trends, we decided to review all existing guidelines developed by all 16 members of the SADC countries, specifically with direct intervention to prevent and manage overweight and obesity.

2.2. Inclusion and Exclusion Criteria

Inclusion

- Adults and children's guidelines were developed to prevent and manage overweight and obesity directly.

- Guidelines from SADC countries
- Guidelines developed within 5 years
- Guidelines which are written in English

Exclusion Criteria

- Adults and children's guidelines were developed to prevent and manage overweight and obesity indirectly [with less information on management and prevention of overweight and obesity].
- Guidelines outside SADC countries
- Guidelines developed more than 5 years ago
- Guidelines which are written in another language

2.3. Data collection

The data search strategy [Appendix A] in PubMed, Medline, and Google Scholar yielded zero results. Further data search was collectively done through grey literature data search from non-profit organisations such as the WHO obesity observatory, government, and the SADC website, which was the most effective way to find the required information.

2.4. Data Analysis

To rigorously evaluate the quality of clinical practice guidelines related to overweight and obesity, two appraisers employed the AGREE II tool, a validated instrument designed to assess methodological rigour and transparency in guideline development. This appraisal focused on six key domains, using a detailed scoring system to quantify the completeness and clarity of reporting, ultimately guiding recommendations on the guidelines' suitability for clinical use. The six covered domains include: scope and purpose, stakeholder involvement, alignment with WHO guidelines, and clarity of presentation. Using a scoring range from 1 to 7, the appraisers were guided to be able to score a total of 23 questions in the tool and how the guideline was developed. A score of 1 [Strongly Disagree] was given when no information was relevant to the AGREE II item or the concept was poorly reported. A score of 7 [Strongly Agree] was given when the quality of reporting was exceptional, and the full criteria and considerations articulated in the User's Manual have been met. Scores between 2 and 6 were assigned when the reporting of the AGREE II item did not meet the full criteria or considerations. The final overall score guided appraisers to rate the quality of the guidelines and determine whether it is recommended for use.

3. Results

Among the 16 SADC countries reviewed, only two had guidelines specifically focused on the prevention and management of overweight and obesity, while the remaining 14 countries relied on policies that indirectly addressed these issues [Table 2]. The guidelines from the two countries [Table 2] meeting the inclusion criteria were subsequently subjected to a quality appraisal to assess their rigour and applicability.

Table 2. Policies and regulations of SADC member states [11].

<i>Policies/regulations/guidelines</i>	<i>Countries that have this in place</i>
<i>National Obesity Strategy/Policy or Action Plan</i>	South Africa, Seychelles
<i>Front-of-pack interpretive nutrition labelling</i>	Draft regulation: South Africa Policy commitment: Eswatini, Namibia

<i>Sugar-sweetened beverage taxation</i>	Angola, Botswana, Comoros, Democratic Republic of Congo, Madagascar, Malawi, Mauritius, Mozambique, Seychelles, South Africa, URT, Zambia, Zimbabwe.
<i>Price subsidies for healthy foods</i>	Seychelles
<i>Policies on the marketing of foods to children</i>	Seychelles, South Africa
<i>School food and beverage environment guidelines/policy</i>	Botswana, Eswatini, South Africa, URT, Zimbabwe
<i>Physical Activity Policy</i>	South Africa, Mauritius, Mozambique
<i>International Code of Marketing of Breast-milk Substitutes [BMS]</i>	
<i>Some provisions of the Code included: Moderately aligned with the Code:</i>	Seychelles Botswana, Comoros, Democratic Republic of the Congo, Madagascar, Malawi, Zambia
<i>Substantially aligned with the Code:</i>	Mozambique, South Africa, URT, Zimbabwe
<i>Complementary foods are covered in the scope of legal measures in the Code.</i>	Botswana, Comoros, Madagascar, Malawi, Mozambique, South Africa, URT, Zambia, Zimbabwe

A guideline from South Africa was identified as relevant and of sufficient quality for use in overweight and obesity prevention and management; however, certain modifications are necessary. The guideline demonstrated high scores in scope and purpose [88.9%], stakeholder involvement [72.2%] and applicability [64.6%] [Table 3]. Although the Seychelles guideline exhibited overall high quality, it primarily addressed broader public health issues and contained limited information specific to overweight and obesity prevention and management across all age groups. Additionally, both appraisals revealed a lack of sufficient detail to provide direct clinical guidance for practitioners and other end-users regarding the management and prevention of overweight and obesity.

Table 3. Quality Appraisal of National Strategy Guideline for Overweight and obesity Prevention and Management in SADC countries.

Domains	South African guideline							Seychelle guideline						
	Appraiser_1	Appraiser_2	Sum of the domain scores	Max Poss Score ^a	Min Poss Score ^b	Total Max domain score [%] ^c		Appraiser_1	Appraiser_2	Sum of the domain scores	Max Poss Score ^a	Min Poss Score ^b	Total Max domain score [%] ^c	
1. Scope and Purpose	18	20	38	42	6	88.9		15	19	34	42	6	77.8	
2. Stakeholder Involvement	15	17	32	42	6	72.2		15	14	29	42	6	63.9	
3. Rigour of Development	26	25	51	112	16	36.5		20	34	54	112	16	39.6	
4. Clarity of Presentation	13	17	30	42	6	66.7		8	13	21	42	6	41.7	
5. Applicability	17	22	39	56	8	64.6		19	20	39	56	8	64.6	
6. Editorial Independence	2	8	10	28	4	25		2	13	15	28	4	45.8	
Overall quality guideline [/7]	4	6						7	7					
Guideline recommendation for use	Yes, with modification	Yes						No	No					

Note: Max-Maximum, Min-Minimum, Poss-possible. **The Total maximum domain score % was calculated as:** ^a Maximum possible score = 7 [strongly agree] x [items in each domain] x 2 [appraisers] ^b Minimum possible score = 1 [strongly disagree] x [items in each domain] x 2 [appraisers] ^c Total maximum domain score [%]: Obtained score [sum of domain score of appraisers] – Minimum possible score/ Maximum possible score – Minimum possible score x 100 i.e. [Domain 1 [3 items]; Domain 2 [3 items]; Domain 3 [8 items]; Domain 4 [3 items]; Domain 5 [4 items]; Domain 6 [2 items]]4. Discussion.

Existing guidelines and strategies to prevent and manage obesity in African countries, particularly in South Africa and the Southern African Development Community [SADC] region, focus on comprehensive, multisectoral approaches aligned with global recommendations.

3.1. South Africa's National Guideline

The current obesity prevention and management guideline in South Africa is outlined in the Strategy for the Prevention and Management of Obesity 2023-2028, which was developed by the Department of Health. This guideline was developed and builds on earlier efforts [2015–2020] and aligns with WHO recommendations. The strategy includes measures such as the health promotion levy on sugar-sweetened beverages, salt reduction regulations, and front-of-pack nutrition labelling to help consumers make informed choices [World Health Organisation, 2022b]. South Africa also has a National Strategic Plan on the Prevention and Control of Non-Communicable Diseases [2022–2027], which includes regular screening and awareness campaigns on obesity for children and adults, aiming to reduce premature mortality from NCDs by one-third by 2030[13].

3.2. International Comparison: Leading Global Strategies

Table 4 showcases diverse, multi-faceted approaches adopted worldwide, combining regulatory innovation, education, multisector collaboration, and digital tools to combat obesity effectively. Chile stands out as a global model with measurable successes in reducing nutrients of concern through mandatory food labelling and advertising laws. Compared to other studies, the systematic review published in 2019 looked at published guidelines on overweight and obesity from countries worldwide. This review indicated that only thirteen out of nineteen guidelines met predefined inclusion criteria[14]. The reviewed guidelines further did not indicate how healthcare professionals should be more involved in implementing these guidelines. This was also mentioned by Fitzpatrick and others, where they concluded that research on the effectiveness of managing overweight and obesity in primary care settings is lacking, and that more studies are required to clarify the role of primary care providers in the context of comprehensive and multi-professional care [15].

Table 4. : International Comparison of Overweight and Obesity Strategies.

<i>County Name</i>	<i>Type of strategy</i>	<i>Date of inception</i>	<i>Strategy Characteristics</i>	<i>Comparison to published research and challenges</i>
<i>Chile</i>	<i>Pioneer in Regulatory Innovation [Food Labelling and Advertising Law [Law 20606]</i>	<i>2016</i>	<i>Serves as a global model for comprehensive obesity prevention.[16]. Key features include:</i> <ul style="list-style-type: none"> • Black octagonal warning labels on foods high in sugar, sodium, saturated fats, or calories[17, 18] • Comprehensive marketing restrictions to children under 14 - among the world's most restrictive[16] • School food environment regulations banning 	<i>Studies show Chile has achieved substantial reductions in sugar purchases by up to 25% in some food categories[17], with 80% of consumers noticing the warning labels after implementation[17]. The proportion of foods requiring warning labels dropped from 71% in</i>

			<p>labelled foods from educational settings</p> <ul style="list-style-type: none"> • Phased implementation with increasingly strict thresholds from 2016 to 2019[16] 	2015-2016 to 53% after the law's strictest phase in 2020[17].
Mexico	Multisectoral National Agreement [National Agreement for Nutritional Health [ANSA],	2010	<p>Represents a comprehensive intersectoral approach.[19, 20]:</p> <ul style="list-style-type: none"> • School-based interventions with nutritional guidelines and beverage bans [21, 22]. • Sugar-sweetened beverage taxation with demonstrated consumption reductions • Industry self-regulation codes for food advertising to children[23] • Front-of-package octagonal warning labels following the Chilean model[24] 	Key Challenge: Harmonising industry interests with public health objectives while maintaining effective accountability mechanisms[20]
Brazil	Municipal Implementation Model [PROTEJA strategy]	2021	<ul style="list-style-type: none"> • 1,320 municipalities committed to implementing comprehensive childhood obesity prevention actions[25] • 41 predefined multisectoral actions across health, education, and community sectors[25] • Financial incentives linked to performance indicators for municipal participation[25] • 20 essential and five complementary actions, including structural environment improvements[25] 	N/A

United Kingdom	Comprehensive Regulatory Framework [Obesity strategy]	2020	Emphasises prevention through environmental change[26]. <ul style="list-style-type: none"> • 9 pm advertising watershed for high-fat, sugar, and salt foods on TV and online[26] • Volume promotion restrictions [“Buy One Get One Free”] on unhealthy foods[9] • Mandatory calorie labelling in restaurants and food outlets • Soft Drinks Industry Levy removing significant sugar content from beverages[26] 	N/A
Japan	Cultural Integration and Prevention Focus [Japan’s Health Japan 21 and Shokuiku food education program]	2005	<ul style="list-style-type: none"> • Basic Law on Shokuiku was enacted in 2005 as the first law regulating diets and eating habits[27] • School lunch standards with fresh, locally-sourced ingredients prepared in-house[28] • Cultural food education [Shokuiku] teaching nutrition literacy and traditional food values[27] • The Diet and Nutrition Teacher System was established in 2007 and has over 4,000 teachers[27] 	
Finland	Community-Based Success Story [The North Karelia Project]	1972-1997	Demonstrates the power of community mobilisation for population-level health change.[29, 30]: <ul style="list-style-type: none"> • Community-wide approach involving 	N/A

			<p><i>schools, workplaces, and healthcare facilities</i>[31]</p> <ul style="list-style-type: none"> • Industry collaboration to develop healthier food products like rapeseed oil • Remarkable outcomes: 73% reduction in cardiovascular disease mortality among working-age men in North Karelia[29] 	
Australia	Long-term Framework Approach [National Obesity Strategy]	2022-2035	<p>Provides a 10-year comprehensive framework. [32].</p> <ul style="list-style-type: none"> • Three-ambition structure: supportive environments, empowered individuals, accessible healthcare[32] • Ambitious targets: halt adult obesity and achieve 5% reduction in child obesity by 2030[32] • Federal-state cooperation with shared funding responsibilities[32] • Input from more than 2,750 stakeholders in strategy development[32] 	N/A
Singapore	Digital Innovation and Life-Course Approach	1992	<p>Singapore's approach emphasises digital integration and systematic intervention. [33] :</p> <ul style="list-style-type: none"> • Healthier Choice Symbol program for food products[34, 35] • National Steps Challenge with digital tracking and rewards[34] • Life-course interventions from early childhood through ageing[36, 37] • Five strategic areas: health promotion policies, supportive environments, partner collaboration, 	N/A

			<i>empowerment, and awareness[33]</i>	
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3.2.1. Comparative Analysis: Strengths and Gaps

South Africa's strategic positioning for overweight and obesity prevention is critically examined through a comparative analysis against established international guidelines and standards. This assessment identifies key strengths supporting effective intervention and gaps limiting alignment with global best practices. The analysis serves to inform targeted recommendations for enhancing the national strategy, ensuring it adopts evidence-based approaches that are contextually relevant and capable of achieving measurable public health impact. This evaluation highlights opportunities for refining policy design, implementation mechanisms, and multisectoral coordination to advance South Africa's obesity prevention agenda.

Strengths:

South Africa's overweight and obesity prevention strategy is characterised by a comprehensive framework that addresses all critical intervention areas through six strategic objectives. [38]. The strategy integrates international best practices, including front-of-pack labelling and marketing restrictions, to align with global standards. [22]. South Africa's designation as a WHO frontrunner country facilitates access to technical support and participation in global knowledge exchange networks.[29]. Multisectoral governance mechanisms ensure a broad-based, whole-of-society commitment to obesity prevention efforts. [38]. Additionally, the strategy builds on a solid foundation established by successfully implementing the Health Promotion Levy, contributing to reduced consumption of sugary beverages.[39].

Areas for Enhancement

The current SA implementation timeline of five years is comparatively shorter than that of most internationally successful obesity prevention strategies. Community engagement within the strategy is limited, lacking the robust mobilisation efforts exemplified by the Finnish model [29, 30]. Additionally, there is minimal integration of digital and technology-based interventions, in contrast to the innovative approaches seen in Singapore [34]. At the municipal level, implementation could be enhanced by adopting decentralised frameworks and performance-based incentives, as demonstrated in Brazil's experience [25]. Furthermore, clinical guidance for health professionals and detailed monitoring and evaluation strategies remain inadequate when benchmarked against Australia's national obesity strategy, indicating areas requiring further development to optimise effectiveness.

3.2.2. Key Lessons from International Best Practices

International best practices provide critical insights for refining obesity prevention policies and implementation strategies.

Policy Innovation Priorities:

These include adopting front-of-pack labelling consistent with Chile and Mexico's octagonal warning system, implementing comprehensive advertising bans targeting children as per Chile's regulatory framework [22], and systematically expanding fiscal measures such as the Health Promotion Levy, modelled on the United Kingdom's soft drinks levy [39]. Effective community engagement can be enhanced through mass media campaigns and mobilisation strategies, exemplified by Finland's experience. [29, 30].

Implementation Strategies:

Sustainable change requires extended implementation timeframes, similar to Australia's 10-year strategy [32]. Municipal-level programme effectiveness may be improved by exploring performance-based funding models, drawing from Brazil's approach [25]. Moreover, culturally tailored food education programmes, akin to Japan's Shokuiku initiative, can foster greater local relevance and acceptance [28]. Finally, integrating digital innovation through technology-driven monitoring and

behaviour change tools, as demonstrated in Singapore, supports real-time assessment and adaptive interventions [34].

3.2.3. Global Context: WHO Acceleration Plan

South Africa's participation in the WHO Acceleration Plan to Stop Obesity positions the country among 28 frontrunner nations dedicated to implementing evidence-based interventions [29]. The Plan outlines five key workstreams: the implementation of priority, cost-effective measures such as fiscal policies, marketing restrictions, and food labelling [40]; the development of country-specific roadmaps with clearly defined mid-term [2025] and long-term [2030] targets [40]; the advancement of political and scientific advocacy at both national and international forums; the facilitation of sustained multisectoral stakeholder engagement; and the establishment of robust accountability and reporting frameworks to monitor progress in implementation [40].

3.2.4. Economic and Social Context

International evidence demonstrates that structural interventions represent the most cost-effective approaches for obesity prevention. Fiscal measures, such as sugar-sweetened beverage taxes, have been estimated by the World Health Organization to incur costs of less than \$1 per capita while delivering substantial health benefits [40]. Front-of-pack food labelling systems are also highly cost-effective, entailing moderate implementation expenses relative to their public health impact [40]. Additionally, regulations restricting unhealthy food advertising to children yield significant health benefits at minimal financial cost, highlighting their value as efficient public health interventions [40].

3.2.5. Social Determinants Focus

South Africa's strategy appropriately emphasizes the social and commercial determinants of health, acknowledging that interventions targeting individual behaviour change are insufficient without supportive environmental modifications[38]. This approach aligns with international evidence indicating that effective obesity prevention requires addressing multiple factors, including regulatory and policy-driven modifications to the food environment, and fiscal measures to improve the economic accessibility of healthy foods [39]. Restrictions on marketing to reduce exposure to unhealthy food promotion, and enhancements to the built environment that facilitate physical activity. Implementing the Health Promotion Levy in 2018 exemplifies this strategy's impact, with sugary drink purchases decreasing by 50% within the first year, resulting in an approximate one-third reduction in sugar consumption[39].

3.2. Regional Efforts in SADC Countries

Several countries within the broader Southern African Development Community [SADC] region have formulated national strategies and policies aimed at addressing obesity and non-communicable diseases [NCDs] [Table 2]. Countries including Zimbabwe, Malawi, Tanzania, South Africa, Zambia, Eswatini, and Namibia have established national nutrition and health policies or multisectoral nutrition action plans explicitly targeting obesity prevention. Numerous SADC member states have also implemented fiscal interventions, such as sugar-sweetened beverage [SSB] taxes, to mitigate obesity prevalence. These countries include Angola, Botswana, Comoros, Democratic Republic of Congo, Madagascar, Malawi, Mauritius, Mozambique, Seychelles, South Africa, Tanzania, Zambia, and Zimbabwe. The SADC Strategy and Implementation Plan on the Prevention of Overweight and Obesity underscores the critical importance of multisectoral collaboration in fostering environments conducive to adopting healthy behaviours [1, 13].

33. Alignment with WHO Recommendations

The World Health Organisation [WHO] advocates for comprehensive programs that mitigate obesogenic environments by enhancing access to healthy foods and opportunities for physical

activity throughout all stages of life. Policies across African countries generally align with these recommendations, emphasising key areas such as modifying food environments within schools, homes, and communities, promoting physical activity, and enacting legislative and policy frameworks that facilitate healthier behaviours. Furthermore, these approaches necessitate multisectoral engagement, involving collaboration between government entities, civil society organisations, and the private sector to ensure effective and sustainable implementation [1, 41, 42].

4. Conclusions and Recommendations

4.1. Implementation Recommendations

International best practices suggest several pathways for strengthening South Africa's overweight and obesity prevention strategy across different time horizons.

In the short term [2023–2025], priorities should include accelerating the implementation of front-of-pack labelling based on Chile's octagonal warning model, enhancing enforcement of comprehensive marketing restrictions aimed at children, and expanding the Health Promotion Levy to cover unhealthy foods high in saturated fats and sodium.[39], and developing municipal-level implementation frameworks with performance-based incentives inspired by Brazil's approach [25].

Medium-term developments [2025–2028] should focus on integrating digital health technologies to monitor and support behaviour change [34], intensifying community engagement through mass media campaigns and role model programs[29, 30], creating culturally tailored food education programs adapted to the South African context [28], and establishing robust evaluation systems with regular progress reporting [38].

Recommendations for long-term sustainability beyond 2028 include extending the implementation timeline to over ten years, following Australia's framework [32], integrating obesity prevention with universal health coverage and broader NCD prevention initiatives, taking a regional leadership role by sharing experiences with other African countries, and maintaining collaboration with the WHO for continued global knowledge exchange [29].

4.2. Conclusions

South Africa's Strategy for the Prevention and Management of Obesity [2023–2028] represents a well-designed, evidence-based approach incorporating international best practices while addressing local contexts and challenges. The strategy's comprehensive framework, multisectoral governance, and integration with global initiatives position South Africa for potential success in addressing its obesity epidemic. However, successful implementation will require sustained political commitment, adequate resource allocation, strong enforcement mechanisms, and adaptive management based on emerging evidence and international experiences. Learning from the successes and challenges of countries like Chile, Finland, Mexico, Brazil, and others will be crucial for maximising the strategy's impact and achieving meaningful reductions in obesity prevalence across populations in South Africa and other countries of SADC. The strategy's success will ultimately depend on its ability to create lasting environment and systems changes that make healthy choices easier and more accessible for all South Africans, particularly addressing the significant inequities contributing to the country's obesity burden. With obesity costing the health system R33 billion annually and affecting over 20 million adults, the urgent need for comprehensive action cannot be overstated.

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Appendix A

Search Strategy [PubMed]

[["overweight"[MeSH Terms] OR "overweight"[All Fields] OR "overweighted"[All Fields] OR "overweightness"[All Fields] OR "overweight"[All Fields]] AND ["obese"[All Fields] OR "obesity"[MeSH Terms] OR "obesity"[All Fields] OR "obese"[All Fields] OR "obesities"[All Fields] OR "obesity s"[All Fields]] AND [{"prevent"[All Fields] OR "preventability"[All Fields] OR "preventable"[All Fields] OR "preventative"[All Fields] OR "preventatively"[All Fields] OR "preventatives"[All Fields] OR "prevented"[All Fields] OR "preventing"[All Fields] OR "prevention and control"[MeSH Subheading] OR ["prevention"[All Fields] AND "control"[All Fields]] OR "prevention and control"[All Fields] OR "prevention"[All Fields] OR "prevention s"[All Fields] OR "preventions"[All Fields] OR "preventive"[All Fields] OR "preventively"[All Fields] OR "preventives"[All Fields] OR "prevents"[All Fields]}] AND [{"manage"[All Fields] OR "managed"[All Fields] OR "management s"[All Fields] OR "managements"[All Fields] OR "manager"[All Fields] OR "manager s"[All Fields] OR "managers"[All Fields] OR "manages"[All Fields] OR "managing"[All Fields] OR "management"[All Fields] OR "organization and administration"[MeSH Terms] OR ["organization"[All Fields] AND "administration"[All Fields]] OR "organization and administration"[All Fields] OR "management"[All Fields] OR "disease management"[MeSH Terms] OR ["disease"[All Fields] AND "management"[All Fields]] OR "disease management"[All Fields]}] AND [{"guideline"[Publication Type] OR "guidelines as topic"[MeSH Terms] OR "guidelines"[All Fields]}] AND "SADC"[All Fields]] AND [[y_5[Filter]] AND [booksdocs[Filter] OR systematic review[Filter]]]

["prevention"[All Fields] AND "control"[All Fields]] OR "prevention and control"[All Fields] OR "prevention"[All Fields] OR "prevention's"[All Fields] OR "preventions"[All Fields] OR "preventive"[All Fields] OR "preventively"[All Fields] OR "preventives"[All Fields] OR "prevents"[All Fields]

management: "manage"[All Fields] OR "managed"[All Fields] OR "management's"[All Fields] OR "managements"[All Fields] OR "manager"[All Fields] OR "manager's"[All Fields] OR "managers"[All Fields] OR "manages"[All Fields] OR "managing"[All Fields] OR "management"[All Fields] OR "organization and administration"[MeSH Terms] OR ["organization"[All Fields] AND "administration"[All Fields]] OR "organization and

administration"[All Fields] OR "management"[All Fields] OR "disease management"[MeSH Terms] OR ["disease"[All Fields] AND "management"[All Fields]] OR "disease management"[All Fields]

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