



Assessing the Effectiveness of Public Health Programs in Saudi Arabia in Improving Community Awareness and Promoting Healthy Lifestyles

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Introduction

Public health in Saudi Arabia has undergone rapid evolution in recent decades, driven by national health reforms and the strategic objectives of Saudi Vision 2030. Improving population health, promoting preventive care, and reducing the growing burden of chronic diseases have all become national priorities. Public health programs play a central role in achieving these aims by enhancing community knowledge, changing health behaviors, and fostering sustainable healthy lifestyles. These programs target key risk factors associated with noncommunicable diseases (NCDs), including physical inactivity, obesity, tobacco use, unhealthy eating habits, and inadequate health literacy—issues that have been increasingly prevalent in the Kingdom.

Saudi Arabia faces high rates of obesity, type 2 diabetes, hypertension, and cardiovascular diseases, which collectively contribute to increased healthcare costs and decreased quality of life. Research indicates that lifestyle-related factors are responsible for a significant proportion of premature mortality and morbidity in the Kingdom. As a result, public health initiatives have been designed to shift the focus from treatment to prevention, emphasizing awareness campaigns, community-based interventions, health education strategies, school-based programs, digital health platforms, and policies aimed at improving the broader determinants of health.

This paper aims to critically assess the effectiveness of public health programs in Saudi Arabia in enhancing community awareness and promoting healthy lifestyle behaviors. It explores the strategic approaches implemented by national agencies, evaluates the measurable outcomes of key initiatives, identifies challenges, and highlights opportunities for strengthening public health capacity and impact. Given the rising prevalence of NCDs, evaluating the efficiency of these programs is essential for guiding future improvements and ensuring long-term sustainability.



1. The Public Health Landscape in Saudi Arabia

Saudi Arabia's public health system has undergone significant development as authorities shifted from curative models to preventive approaches. The Ministry of Health (MOH), in collaboration with other government sectors such as the Saudi Health Council, the Saudi Food and Drug Authority (SFDA), and the Ministry of Education, has launched various programs targeting population health determinants. Public health programs in the Kingdom encompass a wide range of initiatives including national vaccination campaigns, health awareness programs, tobacco cessation services, obesity prevention plans, and screening initiatives for NCDs.

The introduction of the Public Health Authority (Weqaya) marked a major advancement in national strategies aimed at controlling chronic diseases. Weqaya focuses on surveillance, research, community awareness, and prevention programs targeting risk factors such as unhealthy diet, physical inactivity, and tobacco use. Moreover, the Saudi Center for Disease Prevention and Control has strengthened preparedness and response for communicable diseases, contributing to broader public health protection.

Several national initiatives have also been integrated into the healthcare transformation program under Vision 2030, emphasizing access to preventive services, improving community engagement, and enhancing health literacy through digital platforms including the "Sehhaty" and "Mawid" applications. These platforms have dramatically expanded access to health information, preventive screenings, and lifestyle improvement tools, especially after the COVID-19 pandemic.

2. Public Health Programs Promoting Healthy Lifestyles

Saudi Arabia has launched a series of programs aimed specifically at improving lifestyle behaviors across all population groups. Among the most influential initiatives is the National Transformation Program (NTP), which incorporates health promotion goals such as reducing obesity prevalence, increasing participation in physical activity, and improving dietary habits. The Quality of Life Program, under Vision 2030, further supports these goals by enhancing community environments that encourage exercise, healthy eating, and general well-being.

2.1 Obesity and Nutrition-Focused Programs

Obesity is a major public health concern in Saudi Arabia, with prevalence estimates exceeding 35% in some adult age groups. In response, various national initiatives have been implemented:

- Healthy Food Strategy, led by SFDA, which regulates calorie labeling in restaurants, reduces salt and trans fats in foods, and raises consumer awareness.



- School-based nutrition programs, which provide education on healthy diets and restrict unhealthy food options in school canteens.
- National campaigns addressing childhood obesity, targeting parents and families to improve early-life nutrition and prevent long-term weight issues.

These initiatives have contributed to increased awareness regarding healthy eating, improved access to nutritional information, and greater public engagement with diet-related behaviors.

2.2 Physical Activity Promotion Programs

Physical inactivity remains a significant risk factor for chronic disease in the Kingdom. To address this, the government implemented:

- “Saudi Steps” Campaign, promoting walking and daily physical activity through community events and digital tracking tools.
- Construction of public parks, pedestrian pathways, and sports facilities across major cities under the Quality of Life Program.
- Health promotion interventions encouraging physical activity among school students and public sector employees.

While physical activity levels remain below global recommendations for many adults, recent surveys indicate positive trends in engagement, particularly among youth and women.

2.3 Tobacco Control Programs

Smoking is a major contributor to preventable diseases in the Kingdom. Public health efforts include:

- National Tobacco Control Program, which implements awareness campaigns, taxation policies, public smoking bans, and access to smoking cessation clinics.
- Introduction of plain packaging and graphic health warnings on tobacco products.
- Enforcement of anti-smoking policies in schools, universities, and public places.

Studies show reduced smoking rates among adolescents and increased utilization of cessation services, indicating the success of these programs.

3. Digital Health as a Catalyst for Awareness and Behavior Change

Digital transformation has significantly impacted public health in Saudi Arabia. Mobile health applications, teleconsultations, and social media campaigns have played major roles in spreading health information and encouraging behavioral change.



3.1 The Sehhaty and Mawid Platforms

These applications allow users to:

- Access health awareness materials.
- Book screening appointments.
- Monitor vaccinations.
- Receive personalized lifestyle recommendations.

Millions of users have benefited from these platforms, making them critical tools in national health promotion efforts.

3.2 Social Media-Based Health Campaigns

Government agencies frequently use Twitter, Snapchat, TikTok, and Instagram to reach younger demographics. Messaging includes nutrition tips, exercise challenges, disease prevention education, and updates on national health events. The high level of social media engagement in Saudi Arabia enhances the reach and effectiveness of public health messaging.

4. Measuring the Impact of Public Health Programs

Evaluating the effectiveness of public health programs requires examining changes in population behavior, awareness levels, and health outcomes.

4.1 Improvements in Health Literacy

Recent studies indicate significant progress in public health awareness regarding healthy eating, physical activity, and chronic disease prevention. Awareness of calorie counts, the importance of walking, and the risks of smoking has increased considerably. Community surveys show improvements in self-reported health knowledge and attitudes toward preventive care.

4.2 Behavior Change Outcomes

Behavioral changes observed include:

- Increased physical activity participation following national walking challenges.
- Improved dietary habits due to calorie labeling and healthier school food policies.
- Higher demand for screening services for diabetes, hypertension, and obesity.

Although behavioral change takes time, evidence suggests that many programs have successfully influenced lifestyle choices.

4.3 Reduction in NCD Risk Factors

Some improvements noted in national health indicators include:



- Gradual decline in smoking rates.
- Slowed increase in obesity prevalence in certain age groups.
- Higher rates of early detection of chronic diseases.

These outcomes reflect the cumulative effect of multiple public health initiatives.

5. Challenges Limiting Program Effectiveness

Despite progress, challenges remain:

5.1 Cultural and Social Barriers

Traditional dietary patterns, social events centered around food, and limited physical activity culture still influence population behavior.

5.2 Limited Program Reach in Rural Areas

Urban regions receive the majority of public health interventions, leaving some rural and remote areas with limited exposure.

5.3 Workforce Capacity and Inter-Sectoral Collaboration

Public health workforce shortages and fragmented collaboration between sectors may limit the expansion of initiatives.

5.4 Behavior Resistance and Sustainability Issues

Behavior change is gradual and often met with resistance, requiring continuous reinforcement to maintain progress.

6. Recommendations for Strengthening Public Health Programs

Based on current outcomes and challenges, several recommendations can enhance program effectiveness:

1. Expand targeted interventions for high-risk groups such as adolescents, elderly populations, and individuals with obesity.
2. Improve inter-sectoral collaboration, particularly between health, education, municipal services, and sports authorities.
3. Increase community-based participatory programs, engaging local organizations and volunteers.
4. Strengthen health literacy education starting from early school levels.
5. Enhance digital tools with personalized health coaching features.



6. Expand access to lifestyle services such as smoking cessation clinics and nutrition counseling in all regions.
7. Conduct ongoing evaluation studies to measure program impact and guide modifications.

Conclusion

Public health programs in Saudi Arabia have demonstrated measurable success in improving community awareness and encouraging healthier lifestyle practices. Through national campaigns, digital tools, regulatory changes, and community-based programs, progress has been made in addressing key risk factors associated with noncommunicable diseases. While challenges remain—such as cultural habits, regional disparities, and sustainability concerns—the overall trajectory is positive and aligned with the goals of Vision 2030. Strengthening these programs through collaboration, innovation, and targeted interventions will ensure continued improvement in population health and contribute to long-term reductions in chronic disease burden. The Saudi experience illustrates the transformative power of public health programming when combined with strategic national vision and community engagement.

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