National commitment to action
on social determinants of health in Jordan:
Addressing obesity

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Executive Summary

There is an obesity epidemic in Jordan, which can be attributed to an increased consumption of food high in sugars and fat in conjunction with a low level of physical activity. Poor eating habits and obesity are associated with specific health conditions, such as heart disease, diabetes and cancers. Reflecting the need to focus on both diet and physical activity as key drivers of obesity, as well as weight management, the recommendations and actions cover a wide range of areas. These range from the establishment of new partnerships to engage non-health sectors, financial and regulatory measures to encourage healthy choices, community education, settings based programs in schools, workplaces and local communities, and improvements in national data collections. Given the nature of these issues, the recommendations emphasize that any regulatory strategies need to be addressed stage by stage, which allows for self and co-regulation to have time to work and for effectiveness to be monitored.

The introduction of simplified food labeling on the front of packages and menus can support healthier food choices, providing easily understood information on calorie, sugar, fat, and salt content, for a standard serve/portion size. In partnerships with industry, health and consumer groups, this program and could be introduced within three years. This move, together with other policy actions mentioned above, would help to increase awareness and knowledge about overweight and obesity as an important determinant of health in Jordan into all policies. Intersectoral action to unify the fragmented efforts should have a significant and positive impact on this problem.

Problem Space

Increasing rates of overweight and obesity have been the subject of intense scientific, political and media attention. In Jordan, the rates of overweight and obesity among adults and adolescents are alarming. According to the 2009 Demographic and Health Survey (DHS), 27.8% of women in Jordan are overweight and 28.7% obese, a total of 56.5% of Jordanian women with a weight that is a health risk. Three per cent of children under 5 were recorded as overweight in 2009. In the DHS for 2007, 27.4% of women were overweight and 20.1% obese, a total of 47.5% women. The problem is more
serious among poorer and less educated sectors of the population. No data for overweight and obesity were collected in the 2002 DHS, and indication of earlier lack of concern about this issue. A very small proportion of women in Jordan is below the normal range (3.2% in 2009) and classified as having chronic energy deficiency. Unfortunately no comparable data on overweight and obesity is available for adult males.

Obesity and overweight imposes huge financial burdens on health care systems and the community at large. The Jordan Ministry of Health estimated the cost of chronic disease at about 1.2 billion Jordanian dinars in 2006. Obesity is associated with a host of related diseases such as type 2 diabetes mellitus, cardiovascular diseases and hypertension. It is also associated with decreased life expectancy and impaired quality of life. Overweight and obesity in women are related to several social and behavioural factors such as early marriage, high parity, and low or middle socio-economic status. Women are also more likely to overeat, especially eating left over foods to prevent wasting the foods. This evidence clearly demonstrates that overweight and obesity should be addressed as a social determinant of health, with the objective of decreasing their prevalence among Jordanians.

Obesity was identified as a major social determinant of health (SDH) in Jordan through the work of two recently established committees, a technical intersectoral committee and an SDH Steering Committee. The technical intersectoral committee included representatives from all sectors concerned with the problem of overweight and obesity. The two committees produced and approved a strategic plan for social determinant of health, highlighting the problem of overweight and obesity. Many national and governorate level studies have measured the prevalence of overweight and obesity among different Jordanian age groups and its' causes. All these studies recommended national programs to overcome this serious problem. In addition, this problem was identified as one of the priority research areas addressed by the National Health Research Priorities in 2009 - 2012 and Health Systems Research Strategy 2011-2015.

The goals of the national intervention to address obesity and overweight were identified as: (1) the reduction of the incidence of overweight and obesity in the community; (2) capacity building of the staff and the targeted groups concerned with the problem; (3) encouraging the use of evidence and scientific information in formulating health and social policies for this and other social determinants
Context

Jordan is a stable lower middle-income country according to World Bank classification in 2010, with a relatively small gap between the most and least disadvantaged groups in terms of health and social outcomes. A country level consultation conducted in 2009 found that obesity, traffic accidents and water safety and scarcity were major social determinants of health, which should be given priority by policy makers in health and related sectors. A major policy document, “The National Agenda”, which prioritizes equity, was issued by the Government of Jordan in 2005. It has recently been updated and continues to guide national policies.

Obesity among women is recognized as an inequity, related to the position of women in society. Factors influencing the unequal and inequitable distribution of obesity in Jordanian society include (1) The lack of appropriate places for women to practice exercises; (2) Women with a large number of children; (3) Low income households, and (4) the poor quality of foods consumed (mainly starchy foods). The other inequity also is noticed among schoolchildren due to lack of strict rules and regulation about foods sold in school canteens, reduction of physical activity classes during schooldays, lack of encouragement and motivation to use school playgrounds after school hours. In addition, inequities are also noticed among university students, related to the high consumption of junk foods and lack of knowledge and awareness about the health benefits of physical activity and healthful dietary habits.

In Jordan, excess and inappropriate food intake and low physical activity are clearly identified as the major causes of overweight and obesity. Excess food intake, especially of high carbohydrate foods in low or middle-income households is a problem. Also, a shortage of suitable places to exercise limits the opportunity for women to practice physical activity.

National policies do not address the causes of this problem, which are lack of national awareness about dietary habits and physical activity, nutrition labeling legislations of produced and imported foods, and inadequate safe areas to practice physical activity.

The major player which influences the policy process at national level and in all health sectors, is the
High Health Council which works with the SDH Steering Committee on policy issues. The Council also takes the responsibility to ensure the incorporation of health issues such as overweight and obesity in all the policies of government institutions. It is supported by the Prime Minister and Cabinet of Jordan

**Planning**

The intersectoral technical committee proposed three main goals to reduce and prevent obesity. First, it aims to reduce the prevalence rates of overweight and obesity among community groups. Secondly it aims to build the capacity in all staff and community groups concerned in the prevention of overweight and obesity. Thirdly, it encourages the use of evidence based and scientific information in formulating health policy for the social determinants of health.

The objectives of the intervention are to:

- Increase nutrition education, the importance of a balanced diet and healthy eating habits
- Establish a monitoring system to estimate the rate of overweight and obesity in all community groups
- Increase physical activity among various community groups.

The target group is the Jordanian community particularly women and children as well as university students.

To address this important issue in Jordan, the Ministry of Health coordinated a strategic planning process involving a broad array of stakeholders and experts who were involved in a wide variety of programs related to research, evaluation, education, communication, policy and advocacy. This eighteen member group included representatives from:

- The governmental sector (Ministry of Health, Ministry of Social Development, Ministry of the Interior)
- The High Health Council
- Academia
A collaborative work plan for all stakeholders was established focusing on the full range of factors that influence obesity. One such factor, social norms (for instance dieting and exercise), could be influenced through media and advertising policies. Another, the quality and content of food could be influenced through agriculture and food policies (for example, on labeling for nutritional information). The availability of food could be influenced by school and workplace nutrition policies, by policies that affect infant nutrition, infrastructure through urban design and transportation policies and by school nutrition policies. The education sector could also contribute through promoting physical education, including access to sport and play facilities outside of school hours. In addition education authorities could organize and support extra curricular activities. Meetings of the technical committee resulted in a list of potential policy initiatives. A range of policy options were identified and prioritized to combat obesity, including:

1. Developing effective, adequately funded and long-term media advertising and public education campaigns to improve eating habits and levels of physical activity, with specific media advertising and targeted public education for priority population groups (women, children, and university students). This plan is being developed in partnership with the Ministry of Health through the Awareness and Communication Health Directorate, the School Health Directorate, and the International and Public Relation Directorate. The Royal Health Awareness Society, the Ministry of Education and Ministry of Higher Education are also involved in this initiative.

2. Simplification and application of nutrition labels: The critical nutritional components to support healthy food choices which need to be included in the front-of the package nutrition rating systems are calories, fat, sugars, and salt. This would apply to food for retail sale as well as on food purchased when eating out, and to be available in settings such as restaurants, food courts and
takeaway restaurants. A committee for this purpose has been formed and approved.

3. Adopting the recommendations of the evidence-based studies by academia. A pilot study will be conducted at The Hashemite University to evaluate the effect of interventional program on the rate of overweight and obesity among university students. A trial in to incorporate social determinant of health in the curricula of nutrition programs is also recommended.

4. Adoption and application of health standards for health canteens of schools and universities: reviewing purchased foods and removal of unhealthy foods from vending machines

5. Open schools and universities for extra curricular leisure programs targeting schoolchildren, adolescents and university enrollers.

6. A prototype training center on SDH through social work center at Jordan University is conducting workshops in order to increase the awareness among different Jordanian health and health related institutions focusing on equity, inequalities and other social determinants of health and their measurements.

**Implementation**

To reverse the obesity epidemic, the physical and food environments must be changed to provide more opportunities for people to eat healthy foods and to be physically active on a daily basis. Accordingly, different strategies implemented on a small scale, the following are some of these strategies:

1. Support walking: Walking is a basic form of transportation and can be an important source of daily physical activity. However, walking can be difficult for residents when communities lack sidewalks, footpaths, walking trails, and safe pedestrian street crossings. Thus, as part of a multisectoral partnership, Greater Amman Municipality opened four public gardens at specific times for women only, so that they could practice exercise and walking.

2. Food labeling: While nutritional content labeling is valuable, understanding it requires considerable knowledge about diet and food types. It is unlikely, therefore, to change food consumption patterns substantially across entire populations. In light of this, there are
increasing calls for food labeling systems that simplify consumer choices so that consumers can choose healthier foods without comprehensive nutritional knowledge. For that reason, nutrition-labeling committee has been approved by the steering committee to simplify food-labeling structure.

3. Publicizing the concept of social determinant of health is necessary especially on the issue of obesity. Because of that, Ministry of Health established a web page for SDH on its website, which was called Jordan Social Determinants of Health (JSDH). This web page will include all related information on SDH such as the strategy, activities, and awareness materials.

Obesity is a complex phenomenon, but the main causes can be grouped into three headings: poor food choice, lack of exercise, and lack of awareness. The stakeholders chose the above implemented approaches as they take part in prevention and reduction the rates of overweight and obesity.

The stakeholders chose the simple and small-scale implementation programs, in the first strategy, ninety-one women involved in this pilot program and it depends on walking. Body weight was measured at the beginning of the program and after 45 days. The nutrition label committee consists of seven members who have knowledge, expertise and interest in nutrition food labeling. The committee members are Academia, MOH, Jordan Food and Drug Organization, Jordan Institution for Standards and Metrology, Amman Chamber of Industry, Jordan Chamber of Commerce and Ministry of Industry and Trade.

Since Jordan is at the beginning of this experience, the allocated resources for this intervention was physical resources only, as the Greater Amman Municipality is a member in the technical and steering committees; they offered governmental free of charge garden to practice walking. Ministry of Health hosted the meeting for nutrition labeling committee, and the web page for SDH. Higher Health Counsel is hosting the steering committee.
As the implemented strategies are at the beginnings, these activities are incorporated into next biennium funding, however local resources should be secured and sustained to ensure institutionalization of these programs.

**Evaluation of results and impacts, including on social determinant health inequities**

In the pilot testing of the program effectiveness, ninety-one women aged 18 – 45 years participated. The program was held three times a week for 2 hours, in the evening; it provided security for the participating women. Participants received a questionnaire to evaluate their knowledge, attitudes and practices (KAP) regarding overweight and obesity. This program was accompanied by awareness lectures covered the following topics:

- Obesity and associated risk factors
- Basic components of healthy diet
- Dietary instruction for combating obesity
- Importance of physical activity
- Health risks of fast foods
- Hypertension and its relation to obesity

A team of trained personnel from the Directorate of Health Safety at Greater Amman Municipality weighed the participants. Their initial mean body weight was 83.7 kg and participants achieved an average weight loss of 1.5 kg during 45 days of practicing walking. The maximum weight loss was 3.8 kg. The participants achieved 2% weight loss of their initial weight. A modest weight loss of 5-15% significantly reduces obesity-related health risks. Weight loss was the only measurement used to monitor the impact of walking on weight loss. Other measures can be used such as calculating body mass index (BMI) and fat percent, using stadiometers and fat monitors. These devices can help to evaluate the effect of certain methods on weight loss.
As mentioned previously, overweight and obesity are more prevalent in women, and one of the inequities of this problem is the lack of appropriate places for women to practice exercises; men can exercise in parks and sports grounds, but there are no comparable spaces available for women. The interventional program stressed on the importance of offering suitable place to practice physical activity (walking) for women. A pilot evaluation of weight loss failed to demonstrate a significant weight loss among participating women.

The program is being expanded to cover more governorates, and will focus specifically on women, children and students. It will concentrate on working through schools, universities, municipalities and civil societies across the country. The overweight and obesity assessment tools, the educational materials, and evaluation of attitudes, knowledge and practices will be modified.

**Follow-up and lessons learned**

Coordination between the different members of the technical committee was the main requirement for this intervention to begin. The main barrier is a lack of adequate funding, which leads to many problems such as difficulties in obtaining adequate and suitable overweight and obesity assessment tools, difficulty in the transportation of assessing tools, and the lack of a female sport trainer to assist the participants in their exercising routines.

Follow up is necessary to achieve the recommended goals of this program. It can be throughout the increase in the number of participants, the creation of a health team including a doctor, nutritionist, nurse and female sports trainer to supervise the training program. These staff will provide services for participants. These should include a medical check up, measurement of weight, height, BMI and blood pressure, instructing the participant about a healthy diet and how to combat overweight and obesity.

Inadequate financial resources for staffing to implement education, and supportive interventions to achieve healthy eating and increased physical activity may lead to unanticipated consequences. The programme should be sustained by increasing advocacy and public support for initiatives, policies and legislation that eliminate barriers to healthy food choices and physically active lifestyles.
Reflecting the need to focus on both diet and physical activity as key drivers of obesity, as well as weight management, the recommendations cover a wide range of action areas. These range from the establishment of new partnerships to engage non-health sectors, financial and regulatory measures to encourage healthy choices, community education, school based settings and programs in schools, workplaces and local communities, and improvements in national data collections. Given the nature of the issues, the obesity recommendations emphasize that any regulatory strategies need to be addressed in a staged approach, which allows for self and co-regulation to have time to work and for their effectiveness to be monitored.

The SDH committees in Jordan have been given the task of raising a flag on a national problem, bringing stakeholders and partners together to set policies, plans and strategies and advocating for financial and resources support to implement plans. The next step is to expand the scope of work on social determinants of health by looking for a new area of national concern within the next two or three years. Equity in safe water distribution has been identified as a possible area to address in this water stressed country.