



www.mecsj.com/

Multi-Knowledge Electronic Comprehensive Journal For Education
And Science Publications (MECSJ)

Issue (39),2020

ISSN: 2617-9563

OBESITY EPIDEMIC IN THE MIDDLE EAST, AN OVERVIEW OF HOW QATAR IS DEALING WITH IT

(1) DR TABINDA BASHIR, Specialist Family Medicine, PHCC, Qatar
(drtabinda@doctors.net.uk)

(2) DR MOHAMMED ABDUL HASEEB, Specialist Family Medicine, PHCC, Qatar
(drhaseeb786@gmail.com)

(3) DR MUHAMMAD SHARIF, Consultant Internal Medicine, Hazm Mebaireek Hospital, Qatar.
(MSharif4@hamad.qa)

1. ABSTRACT

Obesity is the excessive accumulation of body fat and is the result of imbalance between energy intake and energy expenditure. It is detrimental to health and can lead to multiple illnesses. Although at one stage it was a problem of affluent countries, it is increasing in low resource poor countries at an alarming rate now. According to World Health Organisation (WHO) estimates, in 2016, more than 1.9 billion (39%) of world adult population were overweight and of these, over 650 million (13%) were obese ⁽¹⁾.

The global pandemic of obesity has also involved Middle East and around one fifth of the population in this region is obese. The lifestyle changes due to discovery of oil and hence increase in wealth has been a significant contributory factor. Rapid urbanization and new technologies have promoted sedentary lifestyle. The dietary habits have changed with more intake of unhealthy food. This along with reduced physical activity has added to the overall burden of obesity.

Appropriate management of obesity with integrated and multi-disciplinary approach may prevent its development into chronic illness and progression to non-communicable diseases (NCD) including diabetes, hypertension and cardiovascular problems ⁽²⁾.

The obesity related chronic diseases are one of the leading causes of preventable premature death and disability in the World. It is a threat to healthcare systems and the global economies. As costs of obesity are huge, prevention is the key. Countries with healthy populations will be able to drive the healthy economies and improve the well-being of its



citizens⁽³⁾. In the Middle East countries, Qatar and UAE have put into place preventative and management strategies measures to deal with obesity. Other countries have a pressing need to develop strategies to tackle the obesity challenge.

In this article we will review the common reasons for increasing obesity in the Middle East, strategies to deal with this, focusing on Qatar's efforts to combat this pandemic.

KEY WORDS: Obesity, BMI, WHO, Non- Communicable Disease (NCD)

ملخص البحث :

السمنة هي تراكم مفرط للدهون في الجسم وهي نتيجة عدم التوازن بين تناول الطاقة وإنفاق الطاقة. إنه ضار بالصحة ويمكن أن يؤدي إلى أمراض متعددة. على الرغم من أنها كانت في مرحلة ما مشكلة البلدان الغنية ، إلا أنها تتزايد في البلدان منخفضة الموارد الفقيرة بمعدل يندرج بالخطر الآن. وفقاً لتقديرات منظمة الصحة العالمية (WHO) ، في عام 2016 ، كان أكثر من 1.9 مليار (39٪) من البالغين في العالم يعانون من زيادة الوزن ، وأكثر من 650 مليون (13٪) يعانون من السمنة المفرطة.(1)

كما شمل جائحة السمنة العالمي منطقة الشرق الأوسط وحوالي خمس السكان في هذه المنطقة يعانون من السمنة المفرطة. تغييرات نمط الحياة بسبب اكتشاف النفط وبالتالي زيادة الثروة كان عاملاً مساهماً هاماً. أدى التحضر السريع والتكنولوجيات الجديدة إلى تعزيز نمط الحياة المستقرة. تغيرت العادات الغذائية مع تناول المزيد من الأطعمة غير الصحية. وقد أدى هذا إلى جانب انخفاض النشاط البدني إلى زيادة العبء الإجمالي للسمنة. قد تمنع الإدارة المناسبة للسمنة من خلال نهج متكامل ومتعدد التخصصات تطورها إلى مرض مزمن والتقدم إلى الأمراض غير المعدية (NCD) بما في ذلك مرض السكري وارتفاع ضغط الدم ومشاكل القلب والأوعية الدموية.(2) تعد الأمراض المزمنة المرتبطة بالسمنة من الأسباب الرئيسية للوفاة المبكرة التي يمكن الوقاية منها والعجز في العالم. إنه تهديد لأنظمة الرعاية الصحية والاقتصادات العالمية. نظراً لأن تكاليف السمنة ضخمة ، فإن الوقاية هي المفتاح. ستمكن البلدان ذات السكان الأصحاء من قيادة الاقتصادات الصحية وتحسين رفاهية مواطنيها (3). في دول الشرق الأوسط ، وضعت دولة قطر والإمارات العربية المتحدة تدابير وقائية وإدارية للتعامل مع السمنة. البلدان الأخرى لديها حاجة ملحة لتطوير استراتيجيات لمواجهة تحدي السمنة.

سنستعرض في هذا المقال الأسباب الشائعة لزيادة السمنة في الشرق الأوسط ، واستراتيجيات التعامل معها ، مع التركيز على جهود قطر لمكافحة هذا الوباء.

الكلمات المفتاحية: السمنة ، مؤشر كتلة الجسم ، منظمة الصحة العالمية ، الأمراض غير المعدية (NCD)



www.mecsj.com/

Multi-Knowledge Electronic Comprehensive Journal For Education
And Science Publications (MECSJ)

Issue (39),2020

ISSN: 2617-9563

2. INTRODUCTION

World Health Organisation (WHO) defines obesity as body mass index (BMI) of 30 kg/m² or more and considers it as a significant health risk that has only received proper recognition in the last 10 to 15 years ⁽⁴⁾. BMI is a simple index of weight for height and is used to classify obesity and overweight in adults. BMI greater or equal to 25 is overweight and greater or equal to 30 is obese. Based on rapid expansion and impact of obesity leading to physical and psychosocial health problems, it is reasonable to consider it as a public health crisis affecting not only the health of the population of the country but also adding significant burden on the national and health-care budget.

Excess weight gain increases the risk for non-communicable chronic diseases and is associated with diabetes mellitus, high blood pressure, cardiac and cerebrovascular diseases, respiratory disorders, osteoarthritis, gallstones, various cancers and psychosocial health issues ⁽⁵⁾.

There is an increasing problem of rapidly growing obesity and its related medical problems in the Middle East due to recent changes in the social & cultural aspects, diet & nutrition, lack of physical activity and rapid urbanisation.

3. CAUSES OF OBESITY IN THE MIDDLE EAST

There are several factors which could be responsible for high BMI in this region. The list is lengthy but the most common are genetics, ethnicity, environmental factors including high food consumption with little or no physical activity, glorified advertisement of unhealthy meals & drinks and associated modern sedentary affluent lifestyle⁶. Though genetic factors and ethnicity do play a role in distribution of fat mass and body weight, the environmental factors play a much significant role in the rising obesity epidemic in this part of the world as detailed below:

A- DIET

Economic improvement over the last 2-3 decades in most of the Arab countries has brought a significant change in the diet and lifestyle of their population. It has resulted in greater



www.mecsj.com/

Multi-Knowledge Electronic Comprehensive Journal For Education
And Science Publications (MECSJ)

Issue (39),2020

ISSN: 2617-9563

affluence and consumption of diet, which is rich in fats, sugar, salt, refined carbohydrates and low in polyunsaturated fatty acids & dietary fiber. Food habits have become poorer, with a decline in the intake of fruit and vegetables, whole grains, pulses and legumes⁷.

International fast-food chains and increased popularity of processed food and sugar rich beverages have played a significant role in rapidly increasing obesity in Gulf countries. Other factors contributing to rapid rise in obesity in this region include eating out, skipping breakfast and use of unhealthy snacks. In addition, very hot weather in this part of the world contributes to staying up late night for recreational activities and late-night eating habits.

B- LACK OF PHYSICAL ACTIVITY

Rapid economic development in these countries has led to significant changes in the socioeconomic status and lifestyle of population. Car ownership, lack of walking and cycling for mobility, playing electronic games, widespread use of electronic household appliances, spending hours on computers and watching television, use of escalators and travelators in malls have resulted in a more sedentary lifestyle resulting in poor calorie burning and excessive accumulation of body fat⁸.

Extreme hot temperature in this region also plays a role in people staying indoors and travelling by cars even for short distances.

C: EDUCATION

Illiteracy has been associated with the risk of obesity in the population. Lack of knowledge and education affects the behaviour towards food and eating habits. For example, studies have shown that 51% of illiterate Syrians are obese while only 28% of people with a university education are obese. Similarly, Lebanese with limited formal education are twice as likely to be obese ⁽⁹⁻¹⁰⁾.



www.mecsj.com/

Multi-Knowledge Electronic Comprehensive Journal For Education
And Science Publications (MECSJ)

Issue (39),2020

ISSN: 2617-9563

D- SOCIAL AND CULTURAL REASONS

Social and cultural reasons in this region include limited access for females to sports and exercise activities, easy availability of cheap migrant labor as housemaids, multiple pregnancies in females with weight gain due to increased food intake and limited physical activity with each pregnancy and cultural acceptance of overweight and obesity.

E- MEDICAL CAUSES

Medical and psychological problems contributing to the development of obesity are no different to this region when compared to the rest of the world. These include lack of sleep and increased food consumption when one is stressed, angry or bored. In addition the well-recognised medical illnesses associated with weight gain include hypothyroidism, Cushing syndrome, polycystic ovarian syndrome and use of certain medications including steroids, antidepressants, antipsychotics and anti-epileptics 11.

4- STRATEGIES FOR CONTROL AND PREVENTION OF OBESITY:

There is an urgent need to develop and implement strategies to prevent and control this rapidly increasing health problem.

Taking into account the above factors contributing to the problem of obesity and its complications, there is a strong need to make efforts to increase public awareness regarding healthy lifestyle, eating habits and promotion of physical activity to overcome this rapidly rising challenge.

A-POLICIES:

Policies are an integral part of the health system. Policies related to health education at schools, universities and workplaces can contribute to healthy eating habits. There is an urgent need to develop policies regarding food labelling, catering services, physical education across the region. Most Arab states have been putting their efforts to develop policies for the prevention of obesity and health promotion such as soft drink taxation adopted by Saudi



www.mecsj.com/

Multi-Knowledge Electronic Comprehensive Journal For Education
And Science Publications (MECSJ)

Issue (39),2020

ISSN: 2617-9563

Arabia¹² and United Arab Emirates¹³, banning soft drinks and junk food in hospitals in Qatar¹⁴, workplace health promotion in Qatar¹⁵ and nutrition and/or physical activity at the school setting in Qatar¹⁶. Qatar and the United Arab Emirates have developed and implemented policies to introduce physical education courses for all schools¹⁷⁻¹⁸.

B-HEALTH PROMOTION/PUBLIC AWARENESS:

Health education including healthy lifestyle and dietary habits should be provided in schools to achieve the control of obesity at the younger age and to prevent it progressing to adolescent/adults. The importance of healthy nutrition, its positive aspects on health; information and skills related to physical activity and its effects on well-being and healthy weight should be taught as a part of school curricula. Training should be given to teachers to promote physical activity and healthy nutrition.

WHO recommends promoting physical activities through mass media campaigns, increasing availability and accessibility to formal and informal sports and recreational activities for the public. There is a need to develop a set of standards and guidelines to encourage physical activity at workplace, schools and universities.

C-HEALTH SECTOR INTERVENTIONS:

The primary and secondary health care can play a significant role in controlling this serious public health issue and prevent the complications associated with it. Screening for overweight and obesity in primary health care can be done for patients presenting with various other medical issues and counselling offered to high-risk individuals. Qatar has set an exemplary lead by putting the primary healthcare system at the forefront and taking necessary actions for health promotion¹⁹.

The health care sector needs to formulate and promote guidelines on healthy nutrition, lifestyle, physical activity and healthy weight at different ages. They need to organize



www.mecsj.com/

Multi-Knowledge Electronic Comprehensive Journal For Education
And Science Publications (MECSJ)

Issue (39),2020

ISSN: 2617-9563

training courses for health care staff to identify and tackle this condition at early stages. Establishing multi- disciplinary special clinics to treat obese people would be very beneficial too. Use of posters and short video clips can be displayed for people attending health care facilities to deliver the message of healthy living and prevention of diseases. Different campaigns can be started to motivate workforce towards healthy living habits for example offering monthly star awards by occupational health department.

D-FOOD MARKETING:

It is important to implement mandatory restrictions to eliminate marketing of all forms of foods high in fat, sugar and salt. The food labels should be mandatory to help consumers to get the information easily such as color coding of red, yellow and green for different food constituents or the use of terms such as “traffic light system”.

Legislation should be made that provides regulations to restaurants on recommended portion sizes and healthy food preparation methods. Educational programs for workers should be organized on the importance of healthy food preparation.

E-ROLE OF MEDIA:

Media can play a vital role in promoting healthy lifestyles through different educational programmes on all categories of modern media including print media, television, radio, movies, video games. In addition, social media platforms can be used to launch campaigns to motivate and improve the health of the nation.

5-Measures to combat obesity in Qatar:

Qatar is no exception in facing the challenge of this rapidly rising obesity epidemic. Availability of plenty of food and eating out options, unhealthy food choices, minimal physical activity in this country are the main reasons leading to rapid growth of obesity in this region. The WHO STEPS survey in 2014, reported the prevalence of obesity in adults in Qatar as 40.0% in males and 49.7% in females²⁰.



www.mecsj.com/

Multi-Knowledge Electronic Comprehensive Journal For Education
And Science Publications (MECSJ)

Issue (39),2020

ISSN: **2617-9563**

Qatar government has recognised this rapidly growing public health risk and has been taking measures actively to combat it.

1-Qatar National Health Strategy (NHS) 2018-2022 aims to achieve a 5% reduction in the rate of obesity amongst adults and children. The strategy aims to launch national school health programmes to develop a healthy, nutrition-based approach and healthy lifestyle in children. It also targets the improvement in the physical and mental health at the workplace and development of workplace wellness programmes. The health and well-being of the population including the elderly has also been part of the goal and involves arranging awareness campaigns and activities, involving the elderly as well. Qatar aims to provide 80% of the government and semi-government employees access to occupational health.

2-Ministry of Public Health has developed dietary guidelines to help the nation stay healthy and strong and to adapt healthy eating habits to maintain healthy weight, thus reducing the risk of obesity, diabetes and cardiovascular diseases.

3- Many beautiful parks have been laid with plenty of green spaces and outdoor exercise equipment installed to encourage people in Qatar to get active. Residents can take the benefit of these free gyms and spend time to burn calories and at the same time, enjoy the beauty of nature.

4- The second Tuesday of February of each year is designated nationally as a 'Sports Day' for the State, when everyone is encouraged to participate in sporting activities with family, friends and colleagues. The nation-wide sports activities are arranged and carried out at key locations across the Peninsula and the whole population is encouraged to participate with families and friends.

5-Qatar's First National Sports Sector Strategy (2011-2016) sets out plans for an "Active Qatar" campaign. The aim is to educate people on the importance of healthy and active living, to encourage them to be active and influence others. Because the overall activity levels are low across the whole population in Qatar, the campaign promotes active lifestyles for all.



www.mecsj.com/

Multi-Knowledge Electronic Comprehensive Journal For Education
And Science Publications (MECSJ)

Issue (39),2020

ISSN: **2617-9563**

Qatar Active Campaign comprises 30 activities lasting all along the year and includes the sport activities, entertainment programs targeting all age groups and people with special needs.

6- Qatar Olympic Committee (QOC) has the main goal to bring world-class sports events to Qatar, thus encouraging people to participate in sports at all levels. It has developed many programs and initiatives including National Sports Day, Qatar Women's Sports Committee, Qatar Olympic Academy, the Schools Olympic Program, and the Qatar Athlete Development Pathway. The purpose is to spread the physical activities through sports to all in Qatar.

7-Periodical health checks: Doctors recommend annual screening for all, particularly the above 40s to have a health checkup once every year to identify any health-related problems including obesity and the health issues related to it.

8- In addition to preventative measures, the Qatari Government has established at Hamad Medical Corporation (HMC), a service for patients with obesity and weight related issues. The National Obesity Treatment Center provides patient-centered care to deliver comprehensive and multi-disciplinary management to patients with obesity.

6. CONCLUSION

The growing prevalence of obesity and its complications in Arab countries needs serious consideration of development of substantial health promotion strategies and multilevel intersectoral work. Qatar and some of the Arab countries including the United Arab Emirates have made some efforts in that direction but a more focused and holistic approach is needed including development of a more institutional system to create sustainability in this aspect.



www.mecsj.com/

Multi-Knowledge Electronic Comprehensive Journal For Education
And Science Publications (MECSJ)

Issue (39),2020

ISSN: 2617-9563

REFERENCES:

- 1- WHO, Key Facts, Obesity and Overweight. 1 April 2020
- 2- Seidell JC, Halberstadt J, Noordam H, Niemer S: An integrated health care standard for the management and prevention of obesity in The Netherlands. *Family practice*, 29(suppl_1), i153-i156.
- 3- Our Common Future; 1987. Report of the World Commission on Environment and Development. New York: Oxford University Press.
- 4- The World Factbook 2009. Central Intelligence Agency; Washington DC, USA:.
- 5- Wannamethee SG, Shaper AG. Weight change and duration of overweight and obesity in the incidence of type 2 diabetes. *Diabetes care*, 22(8), 1266-1272.
- 6- Centers for Disease Control and Prevention. (2012). Overweight and obesity: Causes and consequences.



www.mecsj.com/

Multi-Knowledge Electronic Comprehensive Journal For Education
And Science Publications (MECSJ)

Issue (39),2020

ISSN: 2617-9563

- 7- Musaiger AO. Diet and prevention of coronary heart disease in the Arab Middle East countries. *Medical principles and practice*, 11(Suppl. 2), 9-16.
- 8- FAO Statistics Division. Food Balance Sheets. Food and Agriculture Organization of the United Nations; Rome, Italy: 2010.
- 9- Sibai M, Hwalla N, Adra N, Rahal B. Prevalence and covariates of obesity in Lebanon: findings from the first epidemiological study. *Obesity research*, 11(11), 1353-1361.
- 10- Fouad MF, Rastam S, Ward KD, Maziak W. Prevalence of obesity and its associated factors in Aleppo, Syria. *Prevention and Control*, 2(2), 85-94.
- 11- National Heart, Lung, and Blood Institute. (2012). What causes overweight and obesity?
- 12- P. Deulgaonkar, "Saudi Arabia introduces 'sin tax' from today," Arabian Business, April 2017
- 13- P. Deulgaonkar, "UAE to impose excise tax on soft drinks starting," Arabian Business, April 2017
- 14- F. Saleem, "Food and beverages guidelines for hospitals issued," The Peninsula Qatar, 2017
- 15- Primary Health Care Corporation (PHCC), Building the Foundation: National Primary Healthcare Strategy 2013–2018, Primary Health Care Corporation, Doha, Qatar, April 2017
- 16- G. Sharma, 2017 "Qatar's Education Ministry bans junk food in school canteens," Qatar Day, May
- 17- Ministry of Development Planning and Statistics, "National development strategy 2011–2016," 2011, (<https://www.mdps.gov.qa/en>)
- 18- MOE UAE, "A brand new physical and health education reform in the UAE," 2017, <https://www.moe.gov.ae/En/MediaCenter/News/Pages/sport.aspx>.
- 19- Primary Health Care Corporation (PHCC), Building the Foundation: National Primary Healthcare Strategy 2013–2018, Primary Health Care Corporation, Doha, Qatar, April 2017, <http://www.nhsq.info/app/media/889>
- 20- World Health Organization (WHO). World Health Statistics 2015. Switzerland, Geneva: WHO; 2015).



www.mecsj.com/

Multi-Knowledge Electronic Comprehensive Journal For Education
And Science Publications (MECSJ)

Issue (39),2020

ISSN: **2617-9563**