

FOSTERING ACTIVE LIVING AND HEALTHY EATING AMONG ARABIC SPEAKING ADULTS LIVING IN THE STATE OF QATAR: A CROSS- SECTIONAL STUDY

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Abstract— Physical inactivity is a global health concern and is considered a substantial risk factor for many chronic non-communicable diseases such as cardiovascular diseases, cancer and diabetes. In Qatar, the prevalence of insufficient physical activity among adults aged 18 and above is high and tends to increase with the recent rapid change in lifestyle. Despite receiving national encouragement from the State for healthy living, many people in Qatar are living a sedentary life and consume diets rich in fats, salts, and sugar. Understanding the challenges and the opportunities to engage in a healthier lifestyle and promoting culturally appropriate multiple intervention programs will ultimately meet the needs and improve the health of the people in the State of Qatar.

Keywords— Physical activity, diet, healthy lifestyle, adults, Middle East, Arab.

I. INTRODUCTION

Physical inactivity is a global health concern and is a substantial risk factor for many non-communicable chronic diseases. For example, worldwide, physical inactivity is estimated to cause 3.2 million deaths and is the cause of 30% of coronary heart disease burden, 27% of diabetes, and 21-25% of breast and colon cancer (WHO, 2016). There is a high incidence of diabetes, cardiovascular diseases, colon and breast cancer and obesity among Arabic people in the Middle East (Cancer Research UK, 2012; Critchely et al., 2016; Min Lee et al., 2012) and Qatar has the highest prevalence of diabetes (16.7%) compared to other GCC countries. (Al Muftah et al., 2016; Al Thani et al., 2016; Bener & Al-Hamaq, 2016; Denholm et al., 2016; Qatar Health report, 2012). In addition, cardiovascular disease is the leading cause of mortality and morbidity in Qatar. According to Qatar National Physical Activity guidelines (2014), 41.4% of adults living in Qatar were obese. Risk factors contributing to the burden of these diseases which should be tackled include diets rich in fat, sugar and salt, insufficient level of physical activity, smoking, and alcohol abuse (Al Kaabi et al., 2015; Qatar Health Report, 2012). In 2010, the World Health Organization reported that 23.3% of people 18 years of age and older worldwide had insufficient level of physical activity (Figure 1).

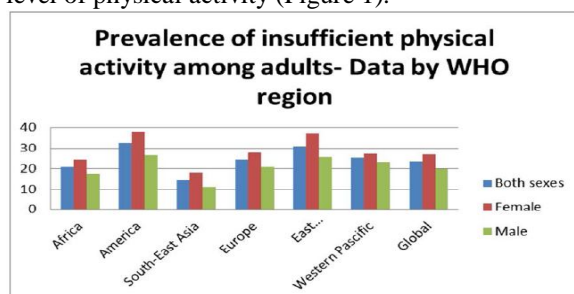


Figure 1: Prevalence of insufficient PA Worldwide - WHO, 2010

In the Middle East, 40% of men and 27% of women reported they were physically active in accordance with the WHO physical activity guidelines (Mabry et al., 2010). In Qatar, more than half of adults 18 years of age and above were insufficiently physically active and the rate increased sharply with age (Chapong, 2008; Qatar National Physical activity guidelines, 2014). Similarly, the prevalence of insufficient physical activity in Qatar among adult males aged 18 and above is 33.4% and females is 49.7% (World Health Organization [WHO] region; Eastern Mediterranean 2010). According to the WHO physical activity guidelines, healthy adults 18-64 years of age should accumulate at least 150 minutes of moderate intensity aerobic activity per week (WHO, 2011). Similarly, the need for culturally appropriate dietary guidelines for Arabic countries called the “Food Dome” was established which also recommends that people should engage in 30 minutes of moderate activity most days of the week. Evidence supports the beneficial outcome of regular exercise on health and life satisfaction (Diener & Chan, 2011). Non-communicable diseases can be prevented or controlled by changing sedentary lifestyle, such as physical inactivity, high consumption of unhealthy food, and smoking (Al Kaabi et al., 2015; Diener & Chan, 2011; Ezzati & Riboli, 2012; WHO, 2016). Therefore, promotion of physical activity and healthy eating should be a component of healthcare programs to help tackle these chronic diseases among Arabic speaking people living in Qatar.

A more systematic and deeper understanding of the challenges and the opportunities to engage in active living and healthy eating that people of Qatar face is needed. Despite receiving national encouragement, endorsing a healthy lifestyle through physical activeness and healthy diet eating is not yet adopted. To date, there is a paucity of data focusing on physical activity and dietary habits among Arabic

people living in Qatar. In this article, we report physical activity levels and food habits of Arabic-speaking adults, 18 years of age and older, in Qatar, participants attitudinal, normative and control beliefs regarding physical activity and healthy diet and factors influencing engagement in healthy lifestyle.

II. RESEARCH DESIGN

A quantitative, cross-sectional survey was conducted with 1,605 Arabic speaking women and men living in Qatar, 18 years of age or older, born and/or raised in Qatar or has lived in Qatar for at least five years, from March 2013 to Jun 2015. To ensure some level of general representative, cross sectional sample of participants were recruited from three universities and colleges and seven health care centers in an urban setting (Doha) and semi-urban/rural settings in both the north and south of Qatar.

Face-to-face interviews using structured questionnaires were used for data collection. Two theoretical frameworks were used to guide our research project: Socioecological Model, the core concept of an ecological model being behaviour is influenced by factors that exert influence over behaviour at multiple levels of an ecological system (e.g., interpersonal, intrapersonal, organizational, policy, and environmental levels), and Theory of Planned Behaviour that guided in the measurement of participants' attitudinal, normative, and control beliefs related to physical activity and healthy diet. Quantitative data analysis was conducted using SPSS version 20.

III. RESULTS AND DISCUSSION

3.1. Table 1 shows selected socio-demographic data of the study participants.

Table 1: Selected Socio-demographic Data

Variable (N=1,605)	N (%)
Gender	
Male	804 (50.1%)
Female	802 (49.9%)
Age (years)	
18-29	517 (32.3%)
30-39	557 (34.8%)
40-49	333 (20.8%)
50-59	136 (8.5%)
60-69	57 (3.6%)
Nationality	
Qatari citizen	495 (31.0%)
Other GCC/Peninsular citizen	31 (1.9%)
Levant citizen	334 (20.9%)
North African citizen	607 (38%)
Other citizen	129 (8.1%)
Residence in Qatar	
≤ 5 years	804 (100.0%)
Religion	
Muslim	1595 (99.1%)
Christian	11 (0.7%)
Living Area	
Urban	1251 (77.9%)
Semi-urban	355(22.1%)
Marital Status	
Single	595 (37%)
Married	958 (59.7%)
Divorced/Separated/Widowed	53 (3.3%)

3.2 Insufficient level of physical activity and poor dietary behavior.

Of the 1,605 women and men participants, most of the participants (98.6%) believe physical activity and eating a healthy diet are beneficial, however, less than half (45%) reported engaging in physical activity and only 34% reported eating healthy foods. Table 2 shows the participants' perceived level of physical activity and healthy eating. Fig.2 (a&b) shows the level of physical activity and healthy eating in relation to selected socio-demographic data (geography, gender, and age).

Table 2: Level of PA and healthy eating.

Perceived Level of Physical Activity and healthy eating	Yes	No	Sometimes
	n (%)	n (%)	n (%)
Do you engage in PA?	729 (45.4%)	466 (29.1%)	409 (25.5%)
Do you think you eat healthy food?	553 (34.5%)	432 (26.9%)	618 (38.5%)

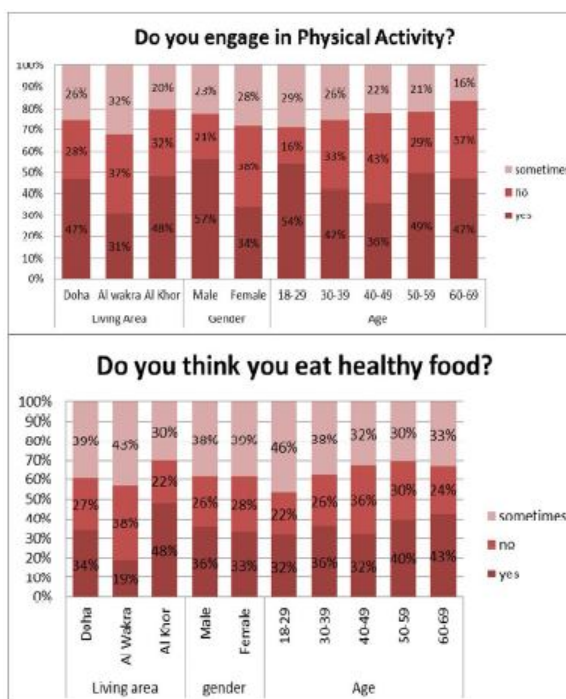


Fig.2. (a & b) PA and healthy diet in relation to selected socio-demographic data.

3.2. Barriers and facilitators to engage in a healthier lifestyle.

The common barriers to physical activity due to lack of time and hot weather were reported by most of the participants (average: 71.6%). While 98.7% of participants believe eating healthy foods would be beneficial, 27% did not feel they eat healthy foods and 39% felt they only eat healthily sometimes. Furthermore, 46.4%, 43.2%, and 25.7% of the subjects find healthy foods do not satisfy their

appetite, not tasty and unpleasant, respectively. Social gatherings (76.7%), lack of healthy foods in restaurants (69.1%), lack of nutrition knowledge (55.2%) were the most reported barriers to eating healthy. In addition, almost half of participants reported that their preference to sugary, salty, and fatty foods prevented them from eating healthy. Fig.3 (a&b).

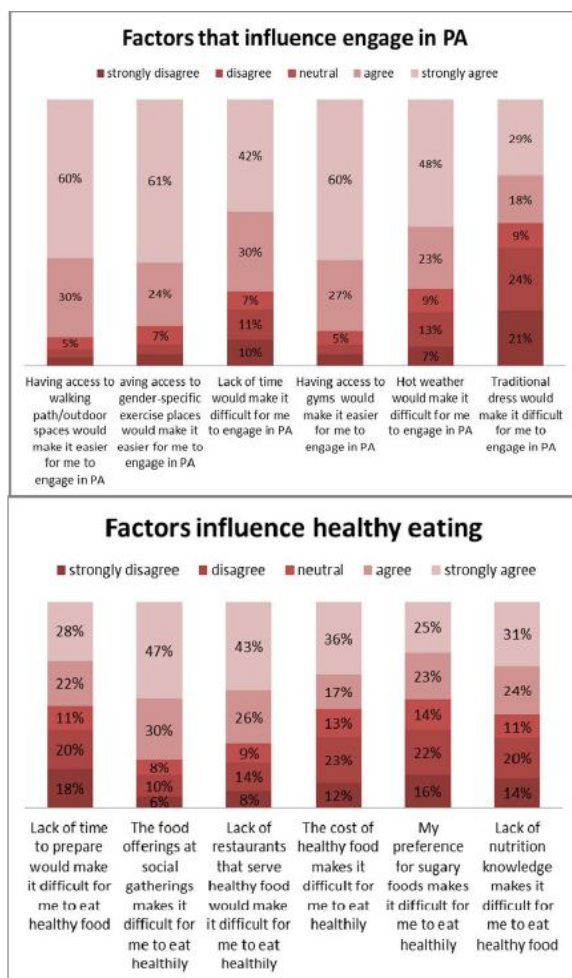


Fig.3. (a & b). Factors influence engagement in PA and healthy eating.

CONCLUSIONS

Level of physical activity and dietary habits among Arabic speaking adults in Qatar were studied and major conclusions are as follows:

- 1- There is insufficient level of physical activity and poor dietary behavior.
- 2- There are many contextual factors that influence participation in physical activity and healthy eating. These factors should be considered as both challenges and opportunities to promote healthier lifestyle in Qatar.
- 3- Culturally appropriate multiple intervention programs to meet the needs of Arabic speaking women and men should be implemented to enhance the health and

quality of life of people living in the State of Qatar.

ACKNOWLEDGMENTS

This publication was made possible by a grant from Qatar National Research Fund under its National Priority Research Program (NPRP 6 – 049 – 3 – 009). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of Qatar National Research Fund. This study was a collaborative effort by many people. On behalf of our research team, we thank our study participants who accepted to join us and share their experience.

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