

Exploring Factors Influence Lifestyle Risk Behaviors Associated with Cardiovascular Diseases Amongst Qatari Women

Abstract

In Qatar, cardiovascular diseases are the leading cause of mortality and morbidity. The incidence of coronary artery diseases such as acute myocardial infarction (AMI) is rising rapidly in Qatar with many Qataris at risk of having ischemic strokes due to hypertension, hypercholesterolemia, and smoking (Bener et al, 2006; Khan, 2007). Atherosclerosis and hypertension are the most common risk factors causing AMI, congestive heart failure, and stroke (Bener et al, 2005). According to the World Health Survey (WHS) in 2006, 13% of Qataris and 15% of non-Qataris are found to be hypertensive. Bener et al (2006) found that the incidence of hypertension was higher in Qatari females than in males. El-Menyar et al's (2009) study of 8,169 patients with acute coronary syndromes in six Middle Eastern Countries revealed that women are more likely to have hypertension and diabetes. Thus, it is of urgent need for the development of culturally appropriate and effective health promotion and CVD/coronary artery diseases prevention programs among the Qatari female population (Al Suwaidi et al, 2004). Studies have shown that many CVDs including coronary artery diseases, can be prevented and/or controlled by modifying lifestyle risk behaviours such as physical inactivity, low fruit and vegetable intake, high fast food consumption, and smoking (Bener, 2006; Musaiger, et al., 2004). Obesity resulting from physical inactivity and unhealthy diet, raise the risk of heart diseases (Jorgensen et al, 2006). Study have shown that 62.6% of Qatari women were overweight, especially females 30 years old and over (Musaiger, Al-Khalaf, & Shahbeek, 1998). Qatar WHS in 2006 reported that among adults, 40% were overweight and 30% were obese, as well, only 40% of Qatari women reported regular participation in sports or other physical activities.

Sheesha (waterpipe) smoking is increasing across the Eastern Mediterranean region, especially among women (Hammal et al, 2008; Maziak et al., 2004). Studies revealed that sheesha smoke effects pulmonary function (Kiter et al, 2000), and elevates blood pressure and heart rate significantly (Al-Safi et al, 2009). The *goal* of this exploratory *ethnography qualitative* study is to find ways to effectively promote cardiovascular/coronary artery diseases prevention activities among Qatari women by investigating factors affecting the ways in which Qatari women (national and non-national Arabic women) make the decision to engage in physical activities, healthy diet and to refrain from sheesha smoking.

We will answer the following *research questions*: (a) How do contextual factors such as social, cultural, and economic influence Qatari women's participation in physical activities, dietary practices and smoking? (b) How does women's knowledge of CVD/coronary artery diseases influence their decision to participate in physical activities, healthy diet, and smoking? and (c) What are culturally appropriate and effective intervention strategies to promote physical activities, healthy diet, and smoking cessation among adult Qatari female population?

Purposive sampling will be used to recruit 30 to 50 Qatari women who are 30 years and over and have confirmed diagnosis of CVD/coronary artery diseases as research participants.

The participants will be recruited from the Cardiac Catheterization Laboratory and Outpatient Clinic at Hamad General Hospital. **Dr. Jassim Al Suwaidi**, the Director of the Cardiac Catheterization Laboratory and an Associate Professor of Medicine at Weill Cornell Medical School in Qatar, is a faculty mentor of this project. He will facilitate the research participants' recruitment process. Participation in the research will be voluntary, informed consent will be obtained, and ethics approval will be sought from the Hamad Medical Research Centre. Individual in-depth interviews will be conducted, using semi-structured questionnaire with open-ended questions. A bilingual (Arabic and English) **female nursing student interviewer** will conduct the interview in Arabic or English. The interview guide will contain questions regarding women participants' knowledge and beliefs about CVD and coronary artery diseases. Interviewing questions will also inquire into: how women make decisions to engage or not engage in physical activities, healthy diet, and smoking; what prevents and what motivates these women to engage in these activities; and what do they perceive as culturally appropriate and effective intervention strategies to promote physical activities, healthy diet, and smoking cessation among adult Qatari females. Questions assessing socio-demographic information about the women participants will also be included. Each participant will be interviewed for one hour to one-and-a half hours. The interviews will be recorded on a digital voice recorder. The data will be converted from audio to text using a transcriber. Qualitative data analysis approach will be used for the examination of narrative data. The **data analysis and data collection** will occur concurrently.

To ensure the study's **rigor and credibility**, researchers will discuss the preliminary results with participants and data will be triangulated and compared with findings from previous studies in the field. The study's findings will be presented at national and international conferences, and will be published in the appropriate academic journals. We plan to submit a proposal to the NPRP for a follow up study that will implement culturally appropriate intervention strategies to promote Qatari women's health and decrease the seriousness and prevalence of CVD and coronary artery diseases among women living in the State of Qatar.