Physical Activity Research in the Gulf Cooperation Council Countries: Progress Made but Work Still to Do

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The Gulf Cooperation Council (GCC) for the Arab States of the Gulf, which include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates, have a collective area of more than 2.6 million kilometers, a population of more than 54 million people, and a total gross domestic product in excess of $3.46 trillion USD. These nations have so much in common in terms of sociopolitical systems, economic status, religion, culture, ethnicity, lifestyle, diet, weather condition, urbanization, and so on.

The physical activity (PA) research in the GCC countries has been growing steadily during the last decade. Based on a bibliometric search in the PubMed database, the total published research in PA during the last 10 years in all GCC countries reached 1483 papers. In comparison with the preceding 10 years from 2002 to 2012, where only 118 papers were published, there has been a 12.6-fold increase in published research in PA during the past decade. Saudi Arabia tops the published research with 754 papers (75.4 papers per year), whereas Bahrain has the lowest published research in PA with 49 papers (4.9 papers per year). Although the research output in PA is growing progressively in GCC countries, it represents a tiny fraction of all biomedical research published in these countries. Taking Saudi Arabia as an example, the published research in PA (in English language) during the last 10-year period represents about 1.5% of all biomedical research output produced by the country during the same period. Overall, although PA research output in the GCC countries has greatly increased over the past 10 years, it is still lagging behind the rest of the world.

Over the course of the last 4 decades, the GCC countries have witnessed an enormous economic growth accompanied by technological transformation. This has led to major negative changes in people’s lifestyle behaviors including low PA, high sedentary behaviors, and increased consumption of a caloric-dense diet and sugar-sweetened beverages among people in this region, particularly among youth. Such negative lifestyle behaviors have contributed considerably to a rise in lifestyle-related non-communicable diseases in the region, which includes, obesity, diabetes mellitus, coronary artery diseases, and hypertension.

Research findings from the GCC countries revealed that physical inactivity among adults, adolescents, and children in the GCC states is considerably high. In one review study, the reported prevalence of adults who met the internationally recommended PA levels in the GCC countries was estimated to be 39.0% to 42.1% for males and 26.3% to 28.4% for females. This is considered well below the percentage of PA levels observed globally for men and women. In addition, results of the Arab Teen Lifestyle Study indicated that adolescents from the GCC countries age 14–19 years exhibited many unhealthy lifestyle behaviors including high levels of inactivity and sedentary time, insufficient sleep duration, and less favorable dietary habits such as breakfast skipping. These unhealthy lifestyle habits were coupled with high prevalence of overweight/obesity. Indeed, the high prevalence of physical inactivity levels in the GCC region is a public health concern. Due to such a high inactivity level, the GCC population seems to have among the highest global population of attributable fractions for major noncommunicable diseases. The population of attributable fractions for coronary heart disease for Saudi Arabia, Kuwait, and the United Arab Emirates are 11.4%, 10.7%, and 10.3%, respectively, compared with a median of 7.8% for the Eastern Mediterranean region and 5.8% worldwide according to the World Health Organization. The population of attributable fractions are similarly higher in Saudi Arabia, Kuwait, and the United Arab Emirates compared with the medians for the Eastern Mediterranean Region and worldwide for diabetes, breast cancer, colon cancer, and all-cause mortality.

It is well recognized that insufficient PA and increased sedentary behaviors are major risk factors for noncommunicable diseases, and that inactivity can lead to premature mortality. Indeed, the high prevalence of physical inactivity levels in the GCC region is a public health concern. Due to such a high inactivity level, the GCC population seems to have among the highest global population of attributable fractions for major noncommunicable diseases. The population of attributable fractions for coronary heart disease for Saudi Arabia, Kuwait, and the United Arab Emirates are 11.4%, 10.7%, and 10.3%, respectively, compared with a median of 7.8% for the Eastern Mediterranean region and 5.8% worldwide according to the World Health Organization. The population of attributable fractions are similarly higher in Saudi Arabia, Kuwait, and the United Arab Emirates compared with the medians for the Eastern Mediterranean Region and worldwide for diabetes, breast cancer, colon cancer, and all-cause mortality.

It is well recognized that cultural values and beliefs as well as socioeconomic factors and the built environment can greatly influence PA. A recent systematic review reported the following common factors that associate with reduced PA in the GCC countries: lack of time or suitable exercise facilities, social support and motivation, gender, cultural norms, and hot climate. In addition, some sociodemographic correlates were negatively associated with PA participation including advanced age, being female, lower education level, and being married, while factors that positively associated with increased PA levels included health benefits, the desire to lose/maintain weight, being male, dietary habits, recreation, and increased body mass index. Environmental factors can be one of the important barriers to PA in the GCC countries, as the long months of summer in most of the GCC countries is quite harsh with typical daytime temperatures well
above 40 °C. However, people in this region are trying to be physically active by resorting to indoor facilities, such as home exercise, fitness centers, or just walking in air-conditioned malls. Also, urbanization in this region can promote higher dependence on motor vehicles and leads to decreased PA. Some countries, but not all, of the GCC have produced national policies/strategies for promoting PA. However, their comprehensiveness and implementation are generally low. Policies for sedentary behaviors are less available. Nevertheless, it appears that there is a need for a coordinated efforts to have a regional policy and action plan aimed at promoting active living and reducing unhealthy behaviors among people of the GCC countries. Multiple sectors need to be involved and working in partnership to develop and implement comprehensive policies, programs, and supportive environments. Such sectors may include health, education, youth and sports, urban planning, transport, media, culture, social work, religious, and women’s affairs, among others. Furthermore, interventional studies are required to determine the most feasible approach to combat inactivity and sedentary behaviors among GCC population.

References