

STUDY OF KNOWLEDGE, ATTITUDE AND PRACTICE OF SAUDI WOMEN TOWARDS PHYSICAL ACTIVITY, 2017

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ABSTRACT

Background: Physical activity is an effective component of health and prevention of disease. Increasing the general health knowledge about physical activity could prevent obesity and chronic diseases.

Objectives: Study the KAP of Saudi women regarding physical activity in KSA. **Methods:** This was a community based survey study conducted among 800 Saudi adult females chosen randomly using a multistage random technique during the period from January to April

2017. Included subjects were asked to fill up a predesigned questionnaire including questions about socio-demographics and assessing the KAP about physical activity. **Results:** Most of females (64%) had poor knowledge while 36% had good awareness about the physical activity. About 72.2% had poor practice pattern but 22.8% had good practice pattern of physical activity. The attitude toward physical activity was good in the majority of subjects (75.1%) and poor in (24.9%) of them. The overall general KAP of included females regarding physical activity was poor in 62% and good in 38%. **Conclusion:** The overall general KAP was low among studied groups thus there is a dispensable need for providing a good and safe environment for women for practicing routine physical activity. Also, more

efforts should be conducted for increasing the KAP of females toward physical activity through educational campaigns in internet, TV and health care facilities.

KEYWORDS: KAP, Physical Activity, Women, KSA.

INTRODUCTION

Physical activity is essential for maintenance of health and prevention of diseases as about 5 of noninfectious diseases were strictly related to physical activity.^[1,2] Also, it is important for enhancing the metabolic process and a key factor of contributing in energy expenditure in youth thus improving the fitness, bone and cardiovascular health.^[3-5] However, physical inactivity significantly has negative impact on the health and well-being of subjects thus increasing the prevalence of chronic diseases.^[6,7]

During the last 30 years, there was a turnover in the lifestyle in the Kingdom of Saudi Arabia as the standard of living has raised and there were modernization and mechanization in all aspects of life. Also, the hot and dry climate in KSA made people tend to use cars rather than walking or using bicycles. The way of food consumption has shown major transformations as there is a rise in adoption to consuming carbonated water, sugar-sweetened beverages and high calorie food.^[8,9]

Many studies showed that the Saudi population don't practice physical activity either in a sufficient duration or adequate frequency and this could be attributed to ignorance, not having time, lack of facilities and lack of motivation.^[10-14] Also, there is a lack in the studies considering physical inactivity in KSA and its complications.^[14] This study aimed to study the KAP of Saudi women regarding physical activity in KSA.

METHODS

Study design and population

A community bases survey study conducted in Saudi Arabia during the period from January to April 2017. The study population was a randomized 800 Saudi adult females selected by multi-stage randomization system from the thirteen governorates of Saudi Arabia. Inclusion criteria were Adult Saudi females aged from 18-50 years old. Non-Saudi females, age less than 18 and incomplete data were excluded from the study.

Study tools

A self-administrated questionnaire that was predesigned and evaluated by the supervisors of the research then was translated into Arabic and distributed among included females. All subjects were interviewed for half an hour separately for filling the questionnaire. This questionnaire consists of 4 parts including demographics of females, questions about knowledge, attitude and practice. The answers were based on yes or no where Yes takes 1 and No takes 0.

Ethical consideration

A permission was taken from the Faculty of Medicine and a written approval was taken from all participants included from the study. The information of subjects were kept private and confident and data were analysed by only the researchers.

Statistical analysis

The statistical analysis was conducted using Statistical Package for Social Sciences (SPSS), version 24 (Chicago, IL). Descriptive analysis of the data was based on frequency and percent. Chi square was used to compare the studied variables. Statistical significance was p. value less than 0.05.

RESULTS**Socio-Demographic Characteristics of females**

The characteristics of the included subjects showed that the mean age was 32.3 years old ranging from 19-50 years old. Most of participants were employed (65.1%) and had a college degree (57.1%) (Table. 1).

Table (1): Characteristics of respondent females (n=800).

Characteristics	N=800	
	Mean \pm SD	Range
Age	32.3 \pm 3.7	19-50
Employment	Frequency	Percent (%)
Employed	521	65.1
Jobless	279	34.9
Education		
College	457	57.1
Primary-Secondary	189	23.6
Illiterate	154	19.3

Knowledge of included subjects

The knowledge of females regarding physical activity showed that most of subjects had good knowledge about the general benefits of physical activity (51.6%) but when coming to its relation to specific diseases, most of subjects answered incorrect or had no knowledge about them (Table. 2).

Table (2): Characteristics of respondent females (n=800).

	No	Yes	Don't Know
1. Physical activity has benefits?	287(35.9%)	413 (51.6%)	100 (12.5%)
2. Physical activity could protect from disease?	480 (60%)	200(25%)	120(15%)
3. Physical activity could prevent osteoporosis?	260 (32.5%)	207 (25.9%)	333 (41.6%)
4. Physical activity could prevent heart disease?	232(29%)	281(35.1%)	287(35.9%)
5. Physical activity could prevent chronic diseases as diabetes mellitus and hypertension?	160 (20%)	340 (42.5%)	300 (37.5%)
6. Physical activity could prevent psychological stress and keep good mood?	212 (26.5%)	398 (49.75%)	190 (23.75%)

4- Level of awareness

The majority of subjects had poor awareness regarding physical activity(64%) and only 33% of females had good knowledge (Table. 3).

Table (3): Respondents' awareness about physical activity.

Level of knowledge	Frequency	Percent (%)
Poor	512	64
Good	288	36
Total	800	100,0

Attitude of included subjects

The attitude of subjects was shown in Table. 4. The majority of subjects had positive attitude toward physical activity as 61.2% were interested in exercising in the future. 70.2% thought that everybody need exercise, 78.9% and 87.6% respectively thought that activity improves self-confidence and decreases depression.

Table (4): Attitude of respondents toward physical activity (n=800).

	Yes	No
1. Are you interested in exercising in the future?	490 (61.2%)	310(38.8%)
2. Do you think everybody need to exercise?	562(70.2%)	238(29.8%)
3. Physical activity improves your confidence?	631(78.9%)	169 (21.1%)
4. Physical activity decreases depression?	701 (87.6%)	99 (12.4%)

Assessing attitude level

The majority of subjects had good attitude (75.1%) while 24.9% had poor attitude toward physical activity as shown in table. 5.

Table (5): Respondents' attitude toward physical activity.

Level of attitude		Frequency	Percent (%)
	Poor	199	24.9
	Good	601	75.1
	Total	800	100,0

Practice pattern of included subjects

As for the practice pattern most of subjects revealed that they have no regular physical exercise (73.6%), 86.6% don't practice physical exercise for 1hr/ day, 87.65 don't often go for walking and 61.1% don't often go to gym for exercise (Table. 6).

Table (6): Practicepattern of respondents toward physical activity (n=800).

	Yes	No
1. Do you practice regular physical exercise?	211(26.4%)	693(73.6%)
2. Do you practice physical exercise for 1hr/ per day?	107(13.4%)	238 (86.6%)
3. Do you often go for walking?	99(12.4%)	701(87.6%)
4. Do you often go to physical activity facilities for exercise?	311(38.9%)	489(61.1%)

Level of practice pattern

The majority of subjects had poor practice pattern (77.2%) while 22.8% had good practice pattern of physical activity(Table. 7).

Table (7): Respondents' practice pattern of included subjects.

Level of practice		Frequency	Percent (%)
	Poor	618	77.2
	Good	182	22.8
	Total	800	100,0

Level of overall KAP of included subjects

The overall general KAP of included subjects showed that 62% of subjects had poor KAP results and only 38% had favorable KAP results (Table. 8).

Table (8): Respondents' KAP of physical activity.

KAP level		Frequency	Percent (%)
	Poor	496	62
	Good	304	38
	Total	800	100,0

DISCUSSION AND CONCLUSION

Physical activity is an effective component of health and prevention of disease. Increasing the general health knowledge about physical activity could prevent obesity and chronic diseases.^[15] This study aimed to assess the KAP of a randomized sample of Saudi adult females toward physical activity as there is a lack of studies that concern the physical activity importance and complications in KSA.

Most of females had a poor knowledge (64%) and practice score (72.2%) however they have a good and favorable attitude (75.1%) toward physical activity. Also, 62% of subjects had a poor KAP results indicating that there is a high prevalence of physical inactivity among the studied subjects.

Also, other studies conducted in KSA reported a high level of physical inactivity.^[2,16] Certainly, the transformation in lifestyle of Saudi population was responsible for high prevalence of physical inactivity and chronic diseases.^[17,18] Also, the physical activity was relatively low and this could be attributed to poor knowledge and practice pattern among children, youth and adult Saudi subjects.^[19-21]

This study had some limitations including the period of study was short, anthropometric measures were not included in the questionnaire and limitations of transportations in rural areas. Also, calculating the level of KAP was based on a self-reported questionnaire.

IN CONCLUSION, the overall general KAP was low among studied groups thus there is a dispensable need for providing a good and safe environment for women for practicing routine physical activity. Also, more efforts should be conducted for increasing the KAP of females toward physical activity through educational campaigns in internet, TV and health care facilities.

REFERENCES

1. WHO (2010): Global status report on noncommunicable diseases. Geneva. Available at: http://www.who.int/nmh/publications/ncd_report2010/en/. Accessed at: March 26-2017.
2. Al-Hazzaa HM, Alahmadi MA, Al-Sobayel HI, Abahussain NA, Qahwaji DM, Musaiger AO (2014): Patterns and determinants of physical activity among Saudi adolescents. *Journal of physical activity & health*, 11: 1202-1211.
3. Latimer-Cheung AE, Rhodes RE, Kho ME, Tomasone JR, Gainforth HL, Kowalski K *et al.* (2013): Evidence-informed recommendations for constructing and disseminating messages supplementing the new Canadian Physical Activity Guidelines. *BMC public health*, 13: 419.
4. Janssen I, Leblanc AG (2010): Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. *The international journal of behavioral nutrition and physical activity*, 7: 40.
5. Poitras VJ, Gray CE, Borghese MM, Carson V, Chaput JP, Janssen I *et al.* (2016): Systematic review of the relationships between objectively measured physical activity and health indicators in school-aged children and youth. *Applied physiology, nutrition, and metabolism = Physiologie appliquee, nutrition et metabolisme*, 41: S197-239.
6. Franklin BA (2011): Health implications of low cardiorespiratory fitness, too little exercise, and too much sitting time: changing paradigms and perceptions. *American journal of health promotion : AJHP*, 25: exi-v.
7. Tremblay MS, Colley RC, Saunders TJ, Healy GN, Owen N (2010): Physiological and health implications of a sedentary lifestyle. *Applied physiology, nutrition and metabolism = Physiologie appliquee, nutrition et metabolisme*, 35: 725-740.
8. Al-Rethaiaa AS, Fahmy AE, Al-Shwaiyat NM (2010): Obesity and eating habits among college students in Saudi Arabia: a cross sectional study. *Nutr J*, 9: 39.
9. El-Qudah JM, Al-Omran H, Abu-Alsoud B, Yousef TOA-S (2012): Nutritional status among a sample of Saudi college students. *Current Research Journal of Biological Sciences*, 4: 557-562.
10. Mandil AM, Alfurayh NA, Aljebreen MA, Aldukhi SA (2016): Physical activity and major non-communicable diseases among physicians in Central Saudi Arabia. *Saudi medical journal*, 37: 1243-1250.
11. Al-Tannir MA, Kobrosly SY, Elbakri NK, Abu-Shaheen AK (2017): Prevalence and predictors of physical exercise among nurses. A cross-sectional study. *Saudi medical journal*, 38: 209-212.

12. Ansari T, Alghamdi T, Alzahrani M, Alfheid F, Sami W, Aldahash BA *et al.* (2016): Risky health behaviors among students in Majmaah University, Kingdom of Saudi Arabia. *Journal of family & community medicine*, 23: 133-139.
13. Alshaikh MK, Filippidis FT, Baldove JP, Majeed A, Rawaf S (2016): Women in Saudi Arabia and the Prevalence of Cardiovascular Risk Factors: A Systematic Review. *Journal of environmental and public health*, 2016: 7479357.
14. Musaiger AO, Al-Hazzaa HM (2012): Prevalence and risk factors associated with nutrition-related noncommunicable diseases in the Eastern Mediterranean region. *International journal of general medicine*, 5: 199.
15. Xu F, Wang X, Xiang D, Wang Z, Ye Q, Ware RS (2017): Awareness of knowledge and practice regarding physical activity: A population-based prospective, observational study among students in Nanjing, China. *PloS one*, 12: e0179518.
16. Al-Hazzaa HM (2004): THE PUBLIC HEALTH BURDEN OF PHYSICAL INACTIVITY IN SAUDI ARABIA. *Journal of family & community medicine*, 11: 45-51.
17. Al-Nozha MM, Arafah MR, Al-Mazrou YY, Al-Maatouq MA, Khan NB, Khalil MZ *et al.* (2004): Coronary artery disease in Saudi Arabia. *Saudi medical journal*, 25: 1165-1171.
18. Al-Hazzaa HM (2002): Physical activity, fitness and fatness among Saudi children and adolescents: implications for cardiovascular health. *Saudi medical journal*, 23: 144-150.
19. Al-Zalabani AH, Al-Hamdan NA, Saeed AA (2015): The prevalence of physical activity and its socioeconomic correlates in Kingdom of Saudi Arabia: A cross-sectional population-based national survey. *Journal of Taibah University Medical Sciences*, 10: 208-215.
20. Al-Rafae SA, Al-Hazzaa HM (2001): Physical activity profile of adult males in Riyadh City. *Saudi medical journal*, 22: 784-789.
21. Al-Hazzaa HM (2004): Prevalence of physical inactivity in Saudi Arabia: a brief review. *Eastern Mediterranean health journal = La revue de sante de la Mediterranee orientale = al-Majallah al-sihhiyah li-sharq al-mutawassit*, 10: 663-670.