Awareness of Elderly toward Physical Activity at Primary Health Care Centers

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Abstract:

Background: Elderly people are getting more and more commonplace worldwide. This group, which is divided into early and late old individuals, is sedentary in general. The growing population of these individuals' places increasing demands on health and social services, underscoring the necessity of comprehensive care systems. **Objectives:** The objectives of this present study are to assess the awareness of elderly toward physical activity; and to identify the association between the elderly knowledge towards physical activity with their demographical data. **Methods:** During the current investigation, the descriptive design was used at the Al-Wafaa, Al-Shuhadaa, Al-Muwdaphine, Al-Askan primary health care center in Karbala, Iraq. Between October 23th, 2020, and June 22th, 2023. non probability sample of (65) elderly is chosen. There are two key dimensions to the questionnaire sheet (socio-demographic characteristics and awareness of elderly toward physical activity part). For each elderly client, data is collected using an adopted questionnaire. The validity of the tool's content was determined through the use of panel of experts in which (6) experts presented the questionnaire in order to determine validity, and the instrument's reliability was determined by Cronbach's Alpha correlation coefficient. **Results**: The study outcomes show that the overall level of the knowledge of elderly toward physical activity were moderate with (highest in domain of Household and Leisure activities and lowest in domain of Flexibility and Balance activities); elderly awareness is a significantly different with educational level. **Conclusions:** The study found that the overall awareness of elderly toward physical activity was moderate. A significant association was found between elderly awareness of physical activities and their level of education. **Recommendation:** The study advised that elderly client should be supplied with educational program about the benefit of physical activities and All of the primary health care center should provide educational programs for the elderly toward physical activity especially in the balance exercise, which will improve their awareness of physical activities in the future to a good level.

Keywords: Awareness, Elderly, Physical activities.

Introduction

Traditionally, the term "elderly" has been defined as a person who is 65 years of age or older on a chronological basis. People who are 65 to 74 years old are called "early elderly," while people who are 75 years old or more are called "late elderly" **(1)**. The elderly are among the most sedentary and physically inactive members of society. Looking at the aging muscles, we know that there is a loss of muscle mass of 0.5%-1%

every year, resulting in a fall in strength and a decline in quick force output [2]. The proportion of elderly persons in the globe is steadily rising as the population ages. In 2010, the proportion of people over 65 in the world's population was around 8%. About 16% of the population is expected to exist in 2050, or about 1.5 billion people [3]. Demands on the public health system, medical and social services, and health care delivery are increased by the growing population of older persons. Chronic illnesses raise health care costs, impair quality of life, cause disability, and disproportionately impact older persons. As the number of Americans who reach 65 rises, society has more challenges in providing them with a dignified and comfortable retirement [4]. However, a common misperception in modern culture is that old age is a time to unwind and that physical exercise is unnecessary or even detrimental. The idea that health benefits can only be obtained via constant, intense activity has created an unreachable standard for senior citizens. A lot of medical professionals don't recommend or discuss the benefits of consistent exercise with senior patients. Consequently, a lot of senior citizens have a false or unfavorable perception of physical exercise [5]. Furthermore, exercise has a significant effect on health. Certain impacts are well-established; physical exercise plays a significant role in energy expenditure and has a significant impact on body composition and energy balance. Additionally, it is acknowledged that physical activity is a significant independent modifiable risk factor that protects against type 2 diabetes, colon and breast cancers, cardiovascular disease (CVD), stroke, and other major health outcomes. It is also linked to other important outcomes like mental health, falls, and injuries [6]. In addition, a considerable correlation has been seen between the rise in chronic illnesses throughout the 20th century with physical inactivity. The United States has over 250 000 fatalities annually that are linked to physical inactivity [7]**.** Therefore, the objectives of the current study were to assess awareness of the elderly toward physical activity and to assess the awareness of the elderly toward physical activity to identify the association between the elderly awareness towards physical activity with their socio-demographic characteristics.

Methods

Descriptive research design was used to accomplish the study's objectives by utilizing the assessment method to identify the awareness of elderly toward physical activities in holy city of Karbala from of October 23th, 2020, to June 22th, 2023. The present study is conducted on elderly knowledge in Al-Wafaa, Al-Shuhadaa, Al-Muwdaphine, Al-Askan primary health care center in Karbala, A Convenience non probability sample of (65) elderly selected in study sample. and the data was collected via use the adopted questionnaire (in Arabic). There are two main components to the research questionnaire, which are as follows:

Part I: Is a socio-demographic characteristics which includes variables (Gender, Age, Residence, Marital status, Level of education). **Part II:** Awareness of elderly toward physical activity: This part contains (23) items and adopted to assess the awareness of elderly toward physical activity, its benefits for elderly, awareness about types**.** The items have been rated and scored according to the following pattern: scale was scored as (3) for I know (2) for not sure, and (1) for I do not know. The instrument's reliability was determined in a pilot and Cronbach's Alpha correlation coefficient, and six experts determined the validity of the questionnaire's content. The Statistical Package for Social Sciences version 20 is used to analyze the data in this study. Inferential statistics (percentages, frequencies, standard deviations and Mean of Score) are used in conjunction with descriptive statistics (Chi-Square test). The predictor of significant differences results was determined to be: Significant difference when ($P < 0.05$); It is None significant if ($P > 0.05$) and High significance at ($P < 0.01$).

Results:

Table (1) Demographics characteristic of the participants

Demographic characteristic	Subgroup	F	%
Age	60-70 years	56	86.2
	71-80 years	7	10.8

	81-90 years	1	1.5
	Above 90 years	1	1.5
	Total	65	100.0
		Mean ± SD 65.98± 5.870 Min- Max 60- 97 years	
Gender	Male	38	58.5
	Female	27	41.5
	Total	65	100.0
Marital status	Married	54	83.1
	Divorced	8	12.3
	Widowed	3	4.6
	Total	65	100.0
Level of education	Reads and writes	7	10.8
	Elementary graduate	15	23.1
	High school graduate	30	46.2
	College graduate and higher	13	20.0
	Total	65	100.0

F= frequency, %= percentage, SD= standard division, Min= minimum and Max= maximum

According to the interpretation of (Table 1) data, more than two thirds of the research sample fell into the 60–70-year age category and it presented 56(86.2%), with mean and standard deviation **(65.98± 5.870)** were minimum age been 60 years old and maximum age been 97 years old. According to the gender the most 38(58.5%) were men. The results also shown the majority 54(83.1%) were married. Regarding the level of education, the most 30(46.2%) participants completed high school graduate.

Table (2): Assess of the awareness of elderly toward physical activity

	Items	M	S.D	Eva.
Leisure activities	1. Do you know what is the effect of practicing leisure time activities such as sitting, reading, watching TV, or browsing with a calculator or mobile phone at a rate of less than 30 minutes a day?	2.44	.753	**G**
	2. Do you have knowledge about the importance of participating in walking activities outside the home, for example for a walk, or visiting neighbors or walking to the mosque at a rate of 30 minutes a day or more?	2.55	.730	**G**
	3. Do you have awareness about the benefits of participating in activities inside the home for the purpose of entertainment or exercise?	2.46	.731	**G**

	4. Do you know the importance of participating in light sports or recreational activities, such as table tennis, dominance, or simple animal care on the beach?	2.26	.796	**M**
	5. Do you know the benefit of participating in moderate-intensity sports or recreational activities, such as brisk walking, hunting, or grazing sheep or cows?	2.26	.796	**M**
	6. Do you know what is the benefit of practicing arduous or intense sports or recreational activities such as jogging, or riding a mobile or stationary bike?	2.46	.772	**G**
	7. Do you know the benefits of practicing some of the exercises designed to strengthen the muscles, such as lifting weights, pressing with the hands, or pushing exercises, or shopping from popular markets and walking with weight?	2.29	.824	**M**
	Domain 1	**2.39**	**.412**	**G**
Household activities	8. Do you know how important it is to do light household activities, such as dusting, washing dishes, painting, making greeting cards, arranging flowers, ironing or folding clothes, or taking a shower?	2.35	.818	**G**
	9. Did you know that the effect of performing one of the arduous household activities such as sweeping the house, cleaning floors, cleaning windows, moving or moving furniture, cooking and preparing food, washing the car or the house garage.	2.45	.708	**G**
	10. Do you have awareness about the impact of doing home renovation activities such as painting the house, wallpapering, or electrical work.	2.37	.741	**G**
	11. Do you know the benefits of working in the garden or taking care of the yard of the house, by mowing the lawn or pushing the lawn mower, trimming trees, or landscaping the home garden?	2.42	.768	**G**
	12. Do you have awareness about the impact of meeting some of the needs of people at home such as husband, wife, children, grandchildren, etc.	2.55	.708	**G**
	Domain 2	**2.43**	**.333**	**G**
Balance activities	13. Do you know the benefits of practicing some balance exercises while walking?	2.18	.864	**M**
	14. Do you have awareness about the application of the tips of the fingers and heels for a distance of not less than 10 steps and not more than 20 steps?	1.98	.800	**M**
	15. Do you know a practice of standing on one leg for 10-15 seconds that improves balance?	1.89	.753	**M**
	16. Do you know the importance of avoiding wearing soft or high-heeled shoes that expose them to slipping?	2.26	.834	**M**
	17. Do you know how to use a wall or a chair to achieve walking exercises on tiptoes and heels for distances of not less than ten steps?	2.05	.759	**M**
	18. Do you have awareness about the importance of climbing the stairs on one of the stairs at a rate of five times for each leg.	2.15	.815	**M**

	19. Do you know the effect of raising the right knee, then the left, eight times on the body?	2.02	.875	**M**
	Domain 3	**2.08**	**.385**	**M**
Flexibility activities	20. Do you know that alternately lifting one leg strengthens the hips and thighs at a rate of five lifts for each leg.	2.15	.795	**M**
	21. Do you know that applying the side bending exercise for lower back flexibility at a rate of three times for each side.	2.20	.754	**M**
	22. Do you know the benefit of the neck rotation exercise for 5 seconds in the relaxation position to the right side and then to the left side?	2.35	.856	**G**
	23. Do you know that the arm raise exercise strengthens the shoulders.	2.40	.746	**G**
	Domain 4	**2.28**	**.480**	**M**
Overall		**2.29**	**.288**	**M**

M=mean, SD= standard deviation, Eva./ P=poor (1-1.66), M=moderate (1.67-2.32) and G=good (2.33-3)

In table 2 the result showed the level of the awareness of elderly toward physical activity were moderate with mean 2.29 (Min- Max 1-3) and the high percentage in domain household activities with mean 2.43 while the less percentage in domain Balance activities with mean 2.08.

Table (3): The levels of the elderly awareness toward physical activity'

	Range	F	%	Mean	SD
Poor	**23-38**	1	1.5		
Moderate	**39-54**	43	66.2		
Good	**55-69**	21	32.3		
Total	**23-69**	65	100.0	52.53	6.575

F= frequency %= percentage

In table 3 the result showed the levels of the elderly awareness toward physical activity' at most were moderate (66.2%) with mean 52.53 (Min- Max 23-69).

Table (4): The association between the elderly physical activity awareness and their socio demographic characteristics:

Demographic characteristic	Subgroup	Mean	SD	Analysis	P. value
Age	60-70 years	2.32	.298		.289

	71-80 years	2.10	.142	Cc= -.135-	
	81-90 years	2.11	.		
	Above 90 years	2.26	.		
Gender	Male	2.31	.269	t=.605	.547
	Female	2.27	.317		
Marital status	Married	2.31	.292	F=.344	.710
	Divorced	2.23	.304		
	Widowed	2.22	.217		
Level of education	Reads and writes	2.04	.163	F=4.119	.010
	Elementary graduate	2.28	.252		
	High school graduate	2.28	.278		
	College graduate and higher	2.48	.308		

Significant at P < 0.05, Non-Significant at P > 0.05, Highly Significant at P < 0.01, P=probability value.

Table 4's findings demonstrated statistically significant differences between elderly awareness and educational attainment. at P < 0.05. Also, the result showed there were no significant statistical correlation between elderly awareness with at P > 0.05.

Discussion:

5.1. Discussion of the socio-demographic characteristics of the study participants:

After the analysis of participants' socio-demographic characteristics as shown in table (1) reveals that most (86.2%) of the study samples are within the age group (60 to 70) years old, and about (58.5%) of them are males, and about (83,1%) are married. (46%) of the participants are high school graduate, this result is inconsistent with other study when it turned out that 81.5% of the sample's participants were female. The participants' ages varied from 65 to 101 years old, with a median age of 78 years. Most of them (69.2%) had completed Standard 10 or more in school. They were either widowed (67.2%), married (26.4%), single (4.6%), or divorced (1.8%) [(5)].

5.2. Discussion of the assessment of the awareness of elderly toward physical activity

The result of (Table 2) level of the awareness of elderly toward physical activity were moderate with a mean (2.29) and SD (0.288) however the awareness of elderly in the domain of household activates was good with a mean (2.43) This was helped by the higher percentage of women as a participant that engaging in household activities more than man, while less percentage in domain Balance activities with mean (2.08). While leisure activates and flexibly with (2.39 and 2.28). and as shown in table (4-3) most (66.2%) of elderly have moderate awareness toward physical activity with mean of (52.53%). While other (32.3%) elderly have good awareness toward physical activity and only (1.5%) elderly have poor awareness toward physical activity. This result is inconsistent with other another study which found that the older individuals (76.2%) understood regular physical exercise to comprise sports, running, brisk walking, and swimming, but only (44.9%) knew it to be a planned, scheduled, and repetitive physical activity. The three most well-known advantages of exercise are improving sleep (71.2%), preventing disease (66.7%), and controlling weight (76.2%); 41.1% of respondents also understood that exercise improves overall body health, while the remaining benefits were little known. 75.1% of respondents were aware that it should be done for 30 minutes a day, and 95.3% of respondents recognized that it is beneficial for both young and old. In general, most people (72.9%) had a high understanding of the benefits of frequent physical activity [(8)].

5.3. Discussion of the association between the elderly awareness towards physical activity with their sociodemographic characteristics

As shown in table (4-4) our study indicates that there was non-significant relationship between elderly awareness toward physical activity and their age. This result is in line with other study that found no significant relationship between awareness of physical activity and age among elderly clients [(9)]. Also, our study indicates that there was non- significant relationship between elderly awareness toward physical activity and their gender. This result is also consistent with other study that

stated that variables such as sex was not significantly associated with physical activity awareness [10]. Moreover, our study indicates that there was non-significant relationship between elderly awareness toward physical activity and their marital state. this result is inconsistent with other study that stated that there is significant relationship between elderly awareness of physical activity and martial state [11]. Lastly our study indicates that there was a significant relationship between elderly awareness toward physical activity and their education level. This result is consistent with other study that stated there is a significant relationship between level of education of elderly and awareness of physical activity [12].

Conclusion:

1- Most of the elderly who participated in the study have moderate level of awareness toward physical activity where the awareness of the elderly toward physical activity was the highest in domain of household activities and lowest in the domain of balance activity

2- The study indicates that there is non-significant relationship between elderly awareness toward physical activity and respondents' demographic characteristics including age, gender, martial state but there was a significant relationship between elderly awareness toward physical activity and their level of education

Recommendations:

Due to the moderate level of awareness of elderly, the study recommend an educational programs for the elderly about the benefit of physical activity, all of the primary health care center should provide educational programs for the elderly toward physical activity especially in the balance exercise.

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