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### **Correlation between Physical Activity and Quality of Life of Elderly**

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#### Abstract:

**Background:** Physical activity of old age can slow the loss of bone density and increase the size and strength of muscles, exercise as a daily walk, can keep muscles in good tone, enhance circulation, and promote mental health. The aim of the study is to assess Physical activity among Elderly in Mosul City.

**Material and method:** The non-experimental approach and descriptive type are used in this study. The study is applied on three hospitals (Ibn-Sena Teaching Hospital, Al-Zahrawee Teaching Hospital and Al Salm Teaching Hospital), some primary health care centers, and public clinics in Mosul City.

**Results:** The finding shows that there is a significant statistical interrelationship in health related physical activity.

**Conclusions:** The study concluded that the Elderly's Physical activity were affected by their demographic characteristic (age, sex, marital status, level of education, and type of disease).

Keywords: Physical Activity and Quality of Life, Elderly.

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## Introduction

Regular exercise helps old aged to optimize physical and mental health throughout life. Increased level of physical activity reduced from incidence of coronary health disease , hypertension , obesity , stroke , depression and anxiety . Continuous exercise has the potential to improve sleep mobility , strength and balance , mood and increase life span <sup>(1)</sup>.Hill – Westmoreland and other <sup>(2)</sup> stated that exercise routine for very old people improves strength , flexibility and coordination , decreases the incidence of osteoporotic fracture by lessening likelihood of falling . <sup>(3)</sup> mentioned that exercise for elderly can promote cardiopulmonary fitness , musculoskeletal power , balance , flexibility , and classifed level of prevention to the ,exercise can be a form of primary preventive , delaying disability and disease , exercise in a person with subclinical disability or disease is a form of secondary prevention , like the treatment of hypertension , in which a detectable abnormality (high blood pressure , reduced physical performance , decreased bone density) is treated before it .exercise for tertiary prevention has the goal of reducing recurrence or complications. <sup>(4)</sup> mentioned that exercise of old age can slow the loss of bone density and increase the size and strength of muscles , exercise as a daily walk , can keep muscles in good tone , enhance circulation , and promote mental health . The aim of the study is to assess the correlation between Physical activity and quality of life of elderly.

#### **Methods and Materials:**

non-experimental approach and descriptive type are used in this study. The study is applied on three hospitals (Ibn-Sena Teaching Hospital, Al-Zahrawee Teaching Hospital and Al Salm Teaching Hospital), some primary health care centers, and public clinics in Mosul City. Purposive sample consists of (833) clients,(490) Male and (343) Femal who visited or admitted to the teaching hospitals, some primary health care centers, and public clinics in Mosul City. In older to collect the data of the study, a questionnaire was constructed depending on the previous studies and related literature review. The questionnaire consists of two Parts: Part one includes (7) items which focus on the elderly demographic characteristics such as (age, sex, marital status, occupation , level of education, duration and type of disease).Part two includes (4) main items that contain: ( independency , daily physical activities , psycho-social aspects and life of adaptation). In this study, the total questions include (73) items, in which three-scale options are used in the rating scale were: (2) for (Always), (1) for (Sometimes), and (0)for (Never) . Content validity was determined by presenting the questionnaire to a panel of (12) experts. Internal consistency of the questionnaire is assessed by calculating Cronbach's Coefficient alpha. Analyzed data using SPSS, Version23 using both descriptive statistics, inferential statistics (Means, and SD, Number and percentage )and chi-square <sup>(5-90).</sup>

#### **Results:**

Table (1) Demographic characteristic	s of the study subjects (N=833)
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Variables	No.	%
(A) Sex		
Male	490	58.82
Female	343	41.18
Total	833	100%
(B) Age		
65-74 years	657	78.87
75-84 years	137	16.45
85 years or more	39	4.68
Total	833	100%
(C) Marital status		
Single	20	2.4
Married	593	71.19
Widowed	213	25.57
Divorced	7	0.84

Total	833	100%			
(D) Educational level					
Unable to read and write	452	54.26			
able to read and write	158	18.97			
Primary	93	11.16			
Intermediate	33	3.96			
Secondary	36	4.32			
Institution	28	3.37			
College	33	3.96			
Total	833	100%			
(E) Type of Disease					
Hypertension	157	18.85			
Diabetes mellitus	113	13.57			
Atherosclerosis	118	14.17			
Osteoarthritis and osteoporosis	114	13.69			
Kidney disease	83	9.96			
Respiartory disease	62	7.44			
Cancer	48	5.76			
Cerebrovascular accidents	46	5.52			
Cenitourinary disease	33	3.96			
Thyroid disease	21	2.52			
Visual impairment	21	2.52			
Hearing impairment	17	2.04			
Total	833	100%			

The table shows that the majority of study participants were males and constituted of (58.82%), and most of them aged (65-74) years. In relation to their marital status, most of the whole sample were married and constituted (71.19%). Regarding, their educational level, most of the sample were unable to read and write (54.26%). The highest type of diseases is hypertension and constituted of (18.85%) with lower type of disease hearing impairment (2.04%).

# Table (2) client's responses on Movement and Exercise within 3- level scale by total frequencies, percentages and Chi-Square

Movement and Exercise	Never		Sometime		Always	
	F	%	F	%	F	%
Do you need an aid from other as you move	114	13.69	306	36.73	413	49.58
Is there difficulty as you put on your clothes	139	16.69	290	34.81	404	48.50
Is there difficulty as you walk and move in home	112	13.45	269	32.29	452	54.26
Do you have the ability to practice athletic activities	718	86.20	86	10.32	29	3.48
Are you able to wonder easily	588	70.59	173	20.77	72	8.64
Do you have a difficulty when you have bath	142	17.05	324	38.89	367	44.06
Do you have a difficulty when you get up of bed alone	172	20.65	272	32.65	389	46.70
Obs. $X^2 = 2171.157$ DF = 12, P Value = 0.05 Crit. $X^2 =$			= 21.03	$\overline{\mathbf{X}}_{=1.02}$		

Personal hygiene	F	%	F	%	F	%
Do you feel satisfied by health services provided	109	13.09	411	49.34	313	37.57
Do you satisfied about your health	543	65.18	156	18.73	134	16.09
Do you always caring well with your health	162	19.45	190	22.81	481	57.74
Do you feel any advantage when you visit health centers	129	15.49	505	60.62	199	23.89
Do you follow the healthy guidance	133	15.97	259	31.09	441	52.94
Do you like bathing daily	76	9.12	531	63.75	226	27.13
Obs. $X^2 = 1497.235$ DF = 10, P Value = 0.05 Crit. $X^2 = 18.31$ $\overline{X} = 1.08$						

Table (3) client's responses on Personal hygiene within 3- level scale by total frequencies, percentages and Chi-Square

#### **Discussion:**

Analysis of the results of health problem of elderly clients demographic characteristics had indicated that the majority of them were males and constituted (58.82%) of the total sample, this result could be connected with the tendency of women to stay at home more than men .Data analysis shows that there is a significant statistical difference between elderly clients quality of life domains and their sex .The present study is in disagreement with the study of <sup>(91-92)</sup> who found that (53.24%) of elderly clients are females and (46.76%) of them are males. The study finding revealed there is a significant statistical association of health related quality of life item which concern with daily physical activities assessment. The main event that is noticed in the physical daily activities is the maturity of the clients had difficult in working, bathing and they have difficulty during to get up of bed, this result can be explained by the fact that our society that there is no any encouragement to exercises in the elderly, where many regarded these exercises as an exciter for shyness. In addation, public places such as public gardens and parks which may be suitable places for practising some simple exercises such as running. <sup>(93-95)</sup> mentioned that maintaining a daily routine of activities is fundamental to health in old age. Functional decline is not an inevitable or irreversible consequence of advancing age. Only 5% of people aged 65 years and older need institutional care; 95% remain in the community, with or without physical and social support.

#### **Conclusion:**

The study concludes that indicate that health problems related to quality of life of elderly clients differ according to Physical Activity of health related to aging.

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