# Evaluation of Health Promotion Behaviors for Elderly Population at Geriatric Homes in Baghdad City: Comparative Study

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*Abstract-* **Study aims**: To evaluate health promotion behaviors for elderly population at Geriatric Homes in Baghdad City, to compare between health promotion behaviors for elderly population at public and private Geriatric Homes in Baghdad City, and to determine the relationships between health promotion behaviors for elderly Population and their demographic characteristics of age, gender, education, occupation and socioeconomic status.

Methodology: A descriptive Comparative design is carried throughout the present study to evaluate health promotion behaviors for elderly population at Geriatric Homes in Baghdad City the period of October 22<sup>nd</sup> 2015 to July 19<sup>th</sup> 2016. Nonprobability (purposive) sample of (108) older adults whose age is 65 years old and over, (54) males and (54) females, (54) participants from public and (54) participants from private Geriatric Homes are selected for the present study. Questionnaire is constructed for the purpose of the study. It includes three parts socio-demographic data, general information and health promotion behaviors domains which include physical activity domain, dietary patterns domain, drug use domain, psychological and mental well-being domain and seeking health care domain. The internal consistency reliability of the questionnaire is determined through a pilot study in which split-half technique and Cronbach alpha correlation coefficient are employed. Content validity is achieved through a panel of (16) experts. Data are collected throughout the utilization of the constructed questionnaire and interview technique as means of data collection. Data are analyzed through the application of descriptive and inferential statistical data analysis approaches.

**Results**: The study results indicate that the elderly at geriatric homes have moderate health promotion behaviors of physical activities, dietary patterns, psychological and mental well-being, and health seeking domains, while they exhibit high health promotion behaviors at the drug's use domain, and their demographic data have no impact upon heath promotion behaviors. Also, the study findings present that there is a significant difference between the overall evaluation of health promotion behaviors between the public and private geriatric homes.

**Conclusion:** The study concludes that the elderly are practicing moderate health promotion behaviors because of these behaviors require a high degree of life style change and also it is a complex behaviors. So, the elderly are not able to adhere completely to such behaviors. Also, there is a difference in elderly health promotion behaviors among those in public and private homes and that is because of the differences in the levels

of health care services and health supervision in these geriatric homes.

**Recommendations:** The study recommends that further studies can be conducted at national level to <u>determine</u>, evaluate and compare health promotion behaviors between elderly geriatric homes residents and community elderly. Applying and reinforcing health education programs through establish collaborative work between the Ministry of Labor and Social Affairs and Ministry of Health to enhance the health promotion behaviors for the elderly in geriatric homes residents. The geriatric homes residents can be considered as good target to programs which aim to strengthening and application issues of health promotion.

*Index Terms*- Health promotion behaviors, elderly, and geriatric homes

## I. INTRODUCTION

Health promotion is the combination of environmental and educational supports for actions and conditions of living conducive to health. Health promotion includes social, environmental and political processes that encourage individuals, groups of people or populations to increase control over, and to improve their health <sup>(1)</sup>. Health promotion increases the healthy lifespan of individuals, decreases disease burden, slows functional loss, promotes autonomy, and thus increases quality of life<sup>(2)</sup>.

Most developed world countries have accepted the chronological age of 65 years as a definition of 'elderly' or older person, but like many westernized concepts, this does not adapt well to the situation in Africa. While this definition is somewhat arbitrary, it is many times associated with the age at which one can begin to receive pension benefits. At the moment, there is no United Nations standard numerical criterion, but the United Nations agreed cutoff is 60+ years to refer to the older population<sup>(3)</sup>.

Many people will live to experience ageing. Age-related deterioration is affecting an ever-growing number of people. Although the process is unavoidable, but if we better understand the process, we might be able to positively influence aspects that maintain or promote health and wellness as a person ages, treating and ameliorating symptoms of common conditions associated with ageing<sup>(4)</sup>.

Healthy lifestyle has been defined as the control by individual of all factors that might affect his health and choosing behaviors that are appropriate to his own health status while arranging daily activities. In elderly people, health-promoting activities should aim to increase functionality, increase lifespan, and sustain a comfortable, peaceful, pain-free life. In this way, life satisfaction will increase in the elderly, and their perception of the meaning of life will be more positive <sup>(5)</sup>.

It is very important that elderly remain as independent, autonomous and active as much as possible. So that they able to contribute productively to community. Given these factors, the world health organization has adopted health care for the elderly a priority programme, through radical shift in focus from a clinical model to a health promotion model of care Policies that promote lifelong health, including health promotion and disease prevention, rehabilitative care, mental health services, promotion of healthy lifestyles and a supportive environment, can reduce disability levels associated with old age<sup>(6)</sup>.

Adopting health promotion behaviors is much easier and more effective if we establish supportive community norms and adopt a philosophy that embraces health in all settings and policies. So, we must adopting health promotion as reform strategy to improve the health of elderly at geriatric homes by educating caregivers to decrease learned helplessness and increase independence and self sufficiency of resident <sup>(7)</sup>.

## II. OBJECTIVES

- 1. To evaluate health promotion behaviors for elderly population at Geriatric Homes in Baghdad City.
- 2. To compare between health promotion behaviors for elderly population at public and private Geriatric Homes in Baghdad City.
- 3. To determine the relationships between health promotion behaviors for elderly Population and their demographic characteristics of age, gender and education.

## III. METHODOLOGY

**Design of the Study:** A descriptive Comparative design is carried throughout the present study to evaluate health promotion behaviors for elderly population at Geriatric Homes in Baghdad City the period of October  $22^{nd}$  2015 to May 19<sup>th</sup> 2016.

**Setting of the Study:** The study is conducted at (2) public and (2) private Geriatric Homes' residents in Baghdad City.

**Sample of the Study:** Non-probability (purposive) sample of (108) older adults, (54) males and (54) females, (54)

participants from public and (54) participants from private Geriatric Homes are selected for the present study.

**Study Instrument:** An evaluation tool is constructed by the researcher through intensive review of relevant literatures, studies and Consultation from a panel of experts for the purpose of evaluating the health promotion behaviors for elderly population. The instrument is composed of (3) main parts as follows:

**Part I: Socio-demographic Data of elderly population**: This part is composed of socio-demographic characteristics sheet which is consisted of (7) items, they include age, gender, marital status, level of education, occupation (before entering the geriatric Homes), monthly income, and the method of entering the geriatric homes.

**Part II: General information**: This part is composed of two section Medical history and Smoking and alcohol use.

**a. Medical history:** This section includes (2) items which are concerned with the health status of the older adult.

**1. Chronic disease:** This section is measured as (yes and no).

**2. Operation**: This section is measured as (yes and no).

This description of the investigator is based on the previous and present the health status related older.

**b.** Smoking and alcohol use: This section includes (2) items which are concerned with the Smoking and alcohol use of the older adult.

**Part III: Health Promotion Behaviors Domains:** This part composed of five domains as following:

A. physical activity:

This section is composed of (11) items.

B. **Dietary patterns**:

This section is composed of (10).

C. Drug use:

This section was composed of (10) items.

D. Psychological and Mental well-being:

This section was composed of (11) items.

E. Seeking health care:

This section was composed of (9) items.

**Statistical analysis**: Data are analyzed through the use of Statistical Package of Social Sciences (SPSS) version (19), and application of descriptive and inferential statistical data analysis approaches.

## IV. RESULTS OF THE STUDY

## Table (1): Distribution of the Study Sample by Socio-Demographic Data

List	Demographic Data	Rating	Frequency	Percent	Cumulativ e Percent	
1	Age /years	65-69	50	46.3	46.3	
1		70-74	27	25.0	71.3	

n .					1
		75-79	15	13.9	85.2
		80-84	9	8.3	93.5
		85+	7	6.5	100.0
2	Gender	Male	54	50	50
2	Gender	Female	54	50	100
		Single	30	27.8	27.8
		Married	15	13.9	41.7
3	Marital status	Divorced	15	13.9	55.6
		Widowed	42	38.9	94.4
		Separated	6	5.6	100
		Illiterate	17	15.7	15.7
		Able to read and write	14	13	28.7
	Level of education	Primary	22	20.4	49.1
4		Intermediate	16	14.8	63.9
		Secondary	13	12	75.9
		Institute and college	24	22.2	98.1
		Higher education	2	1.9	100
	Occupation	Retired	57	52.8	53.7
5	(before entering	Unemployed	48	44.4	98.1
5	the geriatric homes)	Other	3	2.8	100
	<b>T</b> ( <b>1</b>	Based On her/his desire	57	52.8	52.8
6	Entry method	Family decision	16	14.8	67.6
	geriatric homes	Absence of a breadwinner	28	25.9	93.5
	a .	Low: <5-10	62	57.4	57.4
7	Socio-economic	Moderate: 11-25	34	31.4	88.8
	status	High : 26-29	12	11.2	100
			1	1	II

This table depicts that most of the study sample (46.3%) is within the first age group (65-69) years old. Both males and females are equally distributed (50%). In addition, (38.9%) of the study sample are widowed, (22.2%) are institute and college graduated, (52.8%) are retired. Regarding to the entry method

into geriatric home, the study results indicate that (52.8%) of the study sample have entered the geriatric home based on their desires. In addition the majority of the study sample (57.4%) is within the first level of socio-economic status (Low).

List	General Information	Rating	Frequency	Percent	Cumulative Percent
1	Suffer from chronic	Yes	79	73.1	73.1
1	diseases	No	29	26.9	100
		Don't	29	26.9	26.9
	2 Suffer from	High B/P	37	34.3	61.1
2		Diabetes	19	17.6	78.7
		Cardiovascular diseases	14	13	91.7
		Other diseases	9	8.3	100
3	Having previous	Yes	51	47.2	47.2
3	surgery	No	57	52.8	100
4	Smolving	Yes	31	28.7	28.7
4	Smoking	No	77	71.3	100
	Namelan of stars 44.	<= 10	81	75	75
5	Number of cigarette per day	11 - 22	15	13.9	88.9
	per day	23 - 34	3	2.8	91.7

5 98.1
9 100
3.7 78.7
9 80.6
8 83.3
95.4
6 100
9 1.9
8.1 100
8.1 98.1
9 99.1
9 100
8.1 98.1
9 99.1
9 100
00

This table presents that (73.1%) of the study subjects are suffering from chronic diseases, (34.3%) have hypertension, (52.8%) have no previous surgeries, (71.3%) do not smoke,

(75%) smoke about 10 cigarettes and less per day, (78.7%) have been smoking since 10 years or less, and (98.1%) do not drink alcohol.

Table (3): Distribution of the Study Sample by Their Overall Evaluation of Health Promotion Domains

Overall evaluation of health promotion	Rating	Frequency	Percent	<b>Cumulative Percent</b>
	Moderate health promotion	98	90.7	90.7
	High	10	9.3	100.0
	Total	108	100.0	

Cut off point for Overall of health promotion behaviors evaluation (low: 52-86.6); (moderate: 86.7-123.3) ;( high: more than 123.3)

This table indicates that (90.7%) of the study subjects have moderate health promotion behaviors.

## Table (4): Distribution of the Study Sample by their Overall Evaluation of Health Promotion Domains

List	OverallEvaluationofHealthPromotionDomains	Rating	Frequency	Percent	Cumulative Percent
		Low health promotion	7	6.5	6.5
1	Physical Activity	Moderate health promotion	97	89.8	96.3
		High health promotion	4	3.7	100.0
		Low health promotion	0	0	0
2	Dietary Pattern	Moderate health promotion	83	76.9	76.9
		High health promotion	25	23.1	100
3	Drug Use	Low	2	1.9	1.9

		health promotion			
		Moderate health promotion	25	23.1	25
		High health promotion	81	75	100
		Low health promotion	3	2.8	2.8
4	Psychological and Mental Well-being	Moderate health promotion	85	78.7	81.5
		High health promotion	20	18.5	100.0
	Health Care Seeking	Low health promotion	12	11.1	11.1
5	Domain	Moderate health promotion	89	82.4	93.5
		High health promotion	7	6.5	100.0

This table shows that the study subjects have moderate health promotion behaviors at all the studied domains, except at the drug use domain, their responses indicate that they have a high health promotion.

# Table (5): The Relationship between the Overall Evaluation of Geriatric Homes Residents' Health Promotion and Their Demographic Data

List	Demographic data	Rating	Overall evaluation of a health promotion		R <sup>2</sup>	<b>X</b> <sup>2</sup>	D.f	p- value
			moderate	high				
		65-69	40	10	.158	5.862	4	0.21
	Age Group	70-74	24	3				
1		75-79	15	0				
		80-84	9	0				
		85+	6	1				
2	2 Gender	Male	46	8	0.100	220	1	0.567
2 G		Female	48	6	0.133	.328		

Continues...

Table (5) to be continued

		Single	23	7		7.761	4	
		Married	12	3				0.101
3	3 Marital status	Divorced	13	2	0.144			
		Widowed	41	1				
		Separated	5	1				
		illiterate	17	0			6	0.47
		Able to read and write	12	2	6.144a 5.591			
	Level of education	Primary	18	4				
4		Intermediate	14	2		5.591		
	cuucation	Secondary	11	2				
		Institute and college	21	3				
		Higher education	1	1				
5	Occupation (before entering	Unemployed	40	8	<b>4.364</b> a	1.582	3	0.664

	the geriatric home)	Retired	51	6				
		Other	3	0				
	Based on her/his desire	49	8					
6	Entry method	family decision	14	2	0.044-	.197	3	0.978
U	geriatric homes	absence of a breadwinner	25	3				
		Other reasons	6	1				
	Socio-economic	Low: <5-10	51	2		5 351		
7	status	Moderate: 11-25	33	7	0.53	5.251	2	0.072
		High : 26-29	14	1		а		

 $R^2$ : multiple Regressions Coefficient;  $X^2$ : Chi- Squared test; d.f: degree of freedom; P-value: probability value; NS: non-significant; S: Significant; HS: Highly Significant

This table depicts that there is a non-significant relationship between the overall evaluation of health promotion behaviors and the residents' demographic data at p-value more than 0.05.

# Table (6): Statistical Difference between the Overall Evaluation of Health Promotion Behaviors and the Types of Geriatric Homes

Overall evaluation health promotion/ types of geriatrics home	Mean	Standard Deviation	Standard Error of Mean	t. test	d. f	P-value
	1.85	0.563	0.077	2.175	106	0.032
	2.04	0.272	0.037	2.175	100	0.032

## t. test, d.f: degree of freedom, p-value: probability value

This table presents that there is a significant difference between the overall evaluation of health promotion behaviors and the types of geriatric homes.

## V. DISCUSSION OF THE STUDY RESULTS

# Part I: Discussion of the Socio-demographic Data and General Information for the Study Sample

Health promotion behaviors are evaluated for elderly participants between ages of (65-69) years old. The study findings reveal that males and females are equally distributed. In addition, the findings of the study sample indicate that (38.9%) of them are widowed, and most of the study subjects are institute and college graduates, Most of the study sample are retired. Regarding to the entry method into geriatric home, the study findings indicate that they have entered the geriatric home based on their desires (Table 1).

These findings are supported by another study which studied the elderly health promotion behaviors and examine the elderly health promotion needs. They find that the majority of the study subjects are more than 60 years old, equal between male and female with high levels of education and many of them are widows<sup>(8)</sup>.

Concerning the socio-economic status, the study results indicate that the study sample socio-economic status is low (Table 1). Regarding to the study sample general information, the study results indicate that the study subjects are suffering from chronic diseases, they have no previous surgeries, they are not smokers, and they do not drink alcohol (Table2).

Predictors of older Japanese adults' health promotion behaviors are identified as physical activity and alcohol and tobacco use. It is found that most of the study subjects are more than 60 years old, and they have a chronic diseases and the majority of them didn't smoke or alcoholic<sup>(9)</sup>.

## Part II: Discussion of the Overall Evaluation of Health Promotion Behaviors Domains among the Elderly in Geriatric Homes

The study results indicate that the study subjects have moderate health promotion behaviors at the physical activities, dietary patterns, psychological and mental well-being, and health seeking domains, while they exhibit high health promotion behaviors at the drug's use domain. Furthermore, the study finding indicate that the study sample, in general, exhibit a moderate health promotion behaviors (Table 3, and 4).

These results come inconsistent with that of those who studied the health promotion behaviors among nurses and elderly visitors. They concluded that the breadth and strength of the evidence means that physical activity should be one of the highest priorities for prevention and treating disease and disablement in older adults because have a deterioration in their health due to the lack in performing the physical activities<sup>(10)</sup>.

In addition, World Health Organization has reported that Ageing is accompanied by physiological changes that can negatively impact nutritional status. Sensory impairments, such as a decreased sense of taste or smell, or both, may result in reduced appetite. Poor oral health and dental problems can lead to difficulty chewing, inflammation of the gums and a monotonous diet that is poor in quality, all of which increase the risk of malnutrition. Gastric acid secretion may be impaired, leading to reduced absorption of iron and vitamin  $B_{12}$ . The progressive loss of vision and hearing, as well as osteoarthritis, may limit mobility and affect elderly people's ability to shop for food and prepare meals. Along with these physiological changes, ageing may also be associated with profound psychosocial and environmental changes, such as isolation, loneliness, depression and inadequate finances, which may also have significant impacts on diet an on the other health promotion behaviors. Also the elderly have taking medications regularly, so they may at risk for a variety of side effects<sup>(11)</sup>.

Examined and it is health promotion among elderly has been concluded that the elderly have a deficient in health promotion behaviors especially physical activities<sup>(12)</sup>. Furthermore, the effective factors on health promotion behaviors and health status in the elderly of the Dena. Have been studied it is found that the average score of the elderly health promotion behaviors in the Dena province is (143.8) which indicates the acceptable level of performing health promoting behaviors in this group, such that (85%) of the elderly had intermediate health promoting behaviors and (15%) had proper behaviors<sup>(13)</sup>.

## Part III: Discussion of the Relationships between Overall Evaluation of Health Promotion Behaviors and Socio-Demographic Characteristics of the Elderly

The data analysis reveal that there is a non-significant relationship between the overall evaluation of health promotion behaviors and the residents' demographic data of age, gender, marital status, the level of education, occupation (before entering the geriatric homes), entry method to geriatric homes, and socioeconomic status (Table 5).

These results are supported by two studies that found that there is no significant relationship between education level, age, gender, and health promotion behaviors<sup>(14)(15)</sup>.

These results are supported by a study that has studied the health promotion behaviors among nursing home residents in Baghdad city. He finds that there is a non-significant relationship between the overall evaluation of health promotion behaviors domains and the residents' demographic data<sup>(16)</sup>.

## Part IV: Discussion of the Significant Differences between the Types of Geriatric Homes regarding Residents' Health Promotion Behaviors

The study findings present that there is a significant difference between the overall evaluation of health promotion behaviors between the public and private geriatric homes. This result has emerged due to the differences in health care services, which are provided at the public and private geriatric homes. Such care plays an important role to affect the health promotion behaviors among residents (Table 6). Unfortunately, no supportive evidence is available in the literature to support the present finding.

### VI. CONCLUSION

The study concludes that the elderly are practicing moderate health promotion behaviors because of these behaviors require a high degree of life style change and also it is a complex behaviors. So, the elderly are not able to adhere completely to such behaviors. Also, there is a difference in elderly health promotion behaviors among those in public and private homes and that is because of the differences in the levels of health care services and health supervision in these geriatric homes.

#### VII. RECOMMENDATIONS

The study recommends that further studies can be conducted at national level to <u>determine</u>, evaluate and compare health promotion behaviors between elderly geriatric homes residents and community elderly. Applying and reinforcing health education programs through establish collaborative work between the Ministry of Labor and Social Affairs and Ministry of Health to enhance the health promotion behaviors for the elderly in geriatric homes residents. The geriatric homes residents can be considered as good target to programs which aim to strengthening and application issues of health promotion.

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