

# Assessment of Old Age Nutritional Status at Geriatric Home in Al-Diwaniyah City

FATIMA R. MOHAMMED<sup>1</sup>, HALA S. ABDULWAHID<sup>2</sup>

<sup>1</sup>MSN, Clinical Nurse Specialist, Ministry of Health and Environment, Baghdad, Iraq

<sup>2</sup>PhD, Professor, College of Nursing, Department of Community Health Nursing, University of Baghdad, Baghdad, Iraq

Correspondence to: Fatima R. Mohammed, E-mail: [fatma.raheem1206a@conursing.uobaghdad.edu.iq](mailto:fatma.raheem1206a@conursing.uobaghdad.edu.iq)

## ABSTRACT

**Background:** Because of the various harmful impacts of malnutrition on older individuals' overall health, well-being, and autonomy, nutrition in the elderly has become a concern. Diet and lifestyle choices, as well as maintaining a healthy body weight, are important for maintaining health at any age, but they are especially important for healthy aging.

**Objective:** Assess old age nutritional status throughout anthropometric measurements and MNA tool at Geriatric Home in AL-Diwaniyah City.

**Methodology:** A cross-sectional study design utilizing the assessment approach is used to assess the nutritional status of the old ages in the Geriatric Home in AL-Diwaniyah City. Non-probability (convenient) sampling approach was used to select a sample of (24) old age live in Geriatric Home in AL-Diwaniyah City. These old age are distributed with respect to their age as early old age of (65-74) year, middle old age of (75-84) year and old-old age of (85 and more) year.

**Results:** Findings demonstrated that the (45.8%) out of 24 participants from old age at geriatric home exhibited moderate nutritional status as described by moderate mean scores 29.08 ( $\pm 6.128$ ).

**Conclusion:** Old ages who are unable to read and write is significantly associated with poor nutritional and those who are less years in geriatric home is significantly associated poor nutritional status. While those who are 9-21 kg/ m<sup>2</sup> is significantly associated with poor nutritional status.

**Keywords:** Assessment, Old Age, Nutritional Status, Geriatric Home.

## INTRODUCTION

Elderly or old age is a term that refers to ages that are close to or above the typical human lifespan. Age restrictions cannot be determined precisely because the term "age" has a different connotation in different communities<sup>1</sup>.

Age is a natural developmental process that brings a slew of changes to one's physical, psychological, hormonal, and social conditions. In biology, the word "old age" refers to "the predictable changes that occur in adult hereditarily representative organisms that survive in adverse environmental conditions as they grow in chronological age." Senior citizens grow increasingly reliant on others<sup>2</sup>.

According to studies, the youngest-old are those between the ages of 65 and 74, the middle-old are those between the ages of 75 and 84, and the oldest-old are those beyond 85<sup>3</sup>.

Nutrition is a collection of actions by which the body's critical organs acquire and utilize nutrients. The body's primary nutritional qualities are to provide the body with the basic elements necessary to construct a healthy body, promote health, prevent disease, and keep the body free of health concerns. Therefore, society must be healthy in terms of nutrition and the nutritional requirements of the body throughout life, and individuals should consume foods rich in proteins, carbohydrates, and vitamins that are suitable for the body in order to obtain the optimal nourishment for a perfect hyacinth body. Eating is critical and necessary for the human body since it supplies the body with needed nutrients and provides it with good food to carry out the basic operations of the body organs' functions on a regular basis<sup>4</sup>.

Because of the various harmful impacts of malnutrition on older individuals' overall health, well-being, and autonomy, nutrition in the elderly has become a concern. Diet and lifestyle choices, as well as maintaining a healthy body weight, are important for maintaining health at any age, but they are especially important for healthy aging. Maintaining a good nutritional intake provides several health and wellness benefits, including delaying and reducing disease risk, preserving independent living, and so allowing for prolonged living independently<sup>5</sup>.

Nutrition has a considerable impact on biological aging, physiological and pathological changes in the aged<sup>6</sup>.

Given the critical role nutrition plays in regulating the aging process, etiology of age-related disease, functional decline, and the development of disabilities, nutritional assessments and monitoring plans for the elderly are critical for ensuring adequate health care and planning health promotion projects. The evaluation of socioeconomic, dietary, biochemical, anthropometric, and clinical data is a component of nutritional assessment. This information identifies at-risk individuals and enables group diagnosis, nutritional awareness, and the development of policies and initiatives<sup>7</sup>.

## METHODOLOGY

**Design:** From September 20, 2021 to May 1, 2022, a cross-sectional study design utilizing the assessment approach is used to assess the nutritional status of the old ages in the Geriatric Home in AL-Diwaniyah City.

**Sampling process:** Non-probability (convenient) sample of (24) old age live in Geriatric Home in AL-Diwaniyah City. These old age are distributed with respect to their age as early old age of (65-74) year, middle age of (75-84) year and old-old age of (85 and more) year.

**Study Instrument:** Under the supervision of the supervisor and the panel of experts, the instrument was modified and implemented in a questionnaire form and used for data collection and measured the variable the nutritional status for old age.

**Administrative arrangements:** Formal administrative permissions are obtained to conduct the present study which include the following: Ministry of Higher Education and Scientific Research University of Baghdad College of Nursing, Ministry of Planning Central Statistical System for the granting permission for conducting the study. Ministry of Labor and Social Affairs Department for People with Special Needs Al-Diwaniyah Geriatric Home to obtain permission for initiating the study.

## RESULTS OF THE STUDY

Table 1: Old Age Socio-Demographic Characteristics (at Geriatric Home)

Variables	Classification	Freq.	%
Age	65-74 years old	8	33.3
	75-84 years old	7	29.2

	85 and older	9	37.5
	Total	24	100.0
Gender	Male	19	79.2
	Female	5	20.8
	Total	24	100.0
Education level	Not read and write	6	25.0
	Read and write	1	4.2
	Elementary	11	45.8
	High school	2	8.3
	College	4	16.7
	Total	24	100.0
Monthly income	<300,000 dinar	17	70.8
	300,000-600,000 dinar	6	25.0
	>600,000 dinar	1	4.2
	Total	24	100.0
Years at Geriatric Home	<1 year	6	25.0
	1-5 years	8	33.3
	6-10 years	6	25.0
	>10 years	4	16.7
	Total	24	100.0
BMI	9-21	3	12.5
	21-23	8	33.3
	>23	13	54.2
	Total	24	100.0
Mid-arm Circumference (cm)	<21cm	2	8.4
	21-22cm	5	20.8
	>22cm	17	70.8
	Total	24	100.0
Mid-leg Circumference (cm)	<31cm	8	33.3
	>31cm	16	66.7
	Total	24	100.0

Table 2: Mean of Scores on Items of Old Age Nutritional Status at Geriatric Home

List	Old age Nutrition at Geriatric Home	Responses	No.	%	M.s ± SD	Ass.
1	Food intake decline	Severe decreased	3	12.5	2.37±0.710	High
		Moderate decreased	9	37.5		
		No decreased	12	50.0		
2	Weight loss	Does not know	12	50.0	1.58±0.653	Low
		Moderate loss	10	41.7		
		No weight loss	2	8.3		
3	Effect of psychological stress of acute disease	High	9	37.5	1.91±0.829	Moderate
		Moderate	8	33.3		
		Mild	7	29.2		
4	Neuropsychological status	Severe dementia	0	0.0	2.45±0.508	High
		Mild dementia	13	54.2		
		No psychological problems	11	45.8		
5	The effect of residency	High	5	20.8	1.95±0.624	Moderate
		Moderate	15	62.5		
		Mild	4	16.7		
6	Daily full meals	One	2	8.3	2.66±0.637	High
		Two	4	16.7		
		Three	18	75.0		
7	Milk 1 cup	Never	3	12.5	2.12±0.612	Moderate
		Sometime	15	62.5		
		Always	6	25.0		
8	Cheese 1 slice	Never	8	33.3	2.12±0.899	Moderate
		Sometime	5	20.8		
		Always	11	45.8		
9	Yoghurt 1 cup	Never	1	4.2	2.20±0.508	Moderate
		Sometime	17	70.8		
		Always	6	25.0		
10	Two or more servings of legumes	Never	6	25.0	1.83±0.564	Moderate
		Sometime	16	66.7		
		Always	2	8.3		
11	Meat, fish or poultry every day	Never	10	41.7	1.75±0.737	Moderate
		Sometime	10	41.7		
		Always	4	16.7		
12	Daily consumption of one or two servings of fruits or vegetables	Never	7	29.2	1.79±0.588	Moderate
		Sometime	15	62.5		
		Always	2	8.3		
13	Daily fluid intake	< 3 cups	7	29.2	1.83±0.637	Moderate
		3-5 cups	14	58.3		

		>5 cups	3	12.5		
14	Mode of feeding	Unable to eat without assistance	3	12.5	2.45±0.721	High
		Self-fed with some difficulty	7	29.2		
		Self-fed without any problem	14	58.3		

Table 3: Overall Evaluation of Old Age Nutritional Status at Geriatric Home

Neuronal Status	Freq.	%	M (±SD)
Poor	5	20.8	29.08±6.128
Moderate	11	45.8	
Good	8	33.3	
Total	24	100.0	

## DISCUSSION

The health of the elderly is a significant factor in determining a population's overall health. Malnutrition is increasing at a rapid rate, mirroring the rise in the global old population. Malnutrition raises the risk of illness and mortality in the elderly. The use of nutritional screening tests among the elderly would guide the implementation of health measures in this regard. Therefore, thus aimed to investigate the nutritional status among older age in home and geriatric home.

**Discussion of the demographic characteristics:** Out of 24 old age people in geriatric home participants in study aged 85 years old and above (37.5%). While, in general population (at home and within families) the results were among 24 participants in the study aged 65-74 years old (58.3%). Through these results, it is clear that the oldest elderly are the ones who lived in the geriatric home. In line with this findings Krzyżmińska-Siemaszko et al.<sup>8</sup>, the most of old age in geriatric home were oldest than those who are general population.

In regards with gender, more than half of studied sample in home and geriatric home were male (79.2% and 66.7%) as compared with those who are female (20.8% and 33.3%) respectively. From the nature of our society, here the woman is considered as a mother and receives more attention than the father, so we find that most of the elderly in the geriatric home are men. This findings come in agreement with findings from Nepal, the most of studied sample were from old age who are male (64%) out of 362 participants<sup>9</sup>.

**Nutritional status among old age at geriatric home:** Findings demonstrated that the (45.8%) out of 24 participants from old age at geriatric home exhibited moderate nutritional status as described by moderate mean scores 29.08 (±6.128) (table 4-2-2) as being influencing factors such as education level and number of years residents in geriatric home as a major factors associated with nutritional status, as well as, the quality of services provided in geriatric home could be interferes with notional status. Another study should be undertaken to evaluate the quality of services provided in geriatric home.

According to MNA studies, about one in every three elderly nursing home residents is at risk of malnutrition as a result of the inadequate quality of services offered to this population<sup>10</sup>.

Our findings are also greater than those of a study conducted in Kayseri/ Turkey, which indicated that as a result of the increasing prevalence of melancholy and diarrhea, the rates of persons at risk of malnutrition and those undernourished were 49.2 percent and 5.8 percent, respectively. Incontinence, cognitive impairment, and physical reliance are all symptoms of incontinence<sup>11</sup>.

In contrast to Saeidlou et al.<sup>11</sup> findings, as conducted in 2008 in an Iranian nursing home indicated that a substantially higher proportion of elderly persons (49.6%) are malnourished.

This could be due to disparities in the research population's demographics and features, as well as the quality of elderly home care.

## CONCLUSION

Nutritional status in geriatric home, old age exhibited a moderate level due to predisposing factors include Education level (Old age who are unable to read and write is significantly associated with poor nutritional). Number of years at geriatric home (Old age who are less years in geriatric home is significantly associated poor nutritional status). BMI (Old age who are 9-21 kg/ m2 is significantly associated with poor nutritional status).

**Recommendations:** Monitoring the nutritional services at Geriatric Homes by the Ministry of Health. There is necessity of implementing public health nutrition-oriented interventions and educational strategies for old age at geriatric home consistent aimed at achieving old age nutrition-related behavioral changes. Engaging the elderly in community activities for better social relationships and entertainment.

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