

Assessment of Caregiver Knowledge Related to the Physiological Changes and Health Problems in Government Geriatric Home at Baghdad City

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Abstract

Population aging can lead to a larger number of individuals with physical and emotional disorders, which increase demand for caregivers, there is a high prevalence of functional disability in older adults and a variability between the genders, with a 42.8% rate among women and 39.6% among men. A quasi-experimental study, Analytical, cross-sectional, non-probability convenient study done with sampling of 20 caregivers was conducted in the Geriatric Care Home in Baghdad City (the governmental geriatric home) for the period from 12th of October 2018 to 20th of January 2019 to assess their knowledge about physiological changes and health problems. A questionnaire was used to collect caregiver's data which consist of two parts: The first part is concerned general information of the study Geriatric home, and the second part involves two domains involving items concerning caregiver's knowledge about physiological changes and health problems and their knowledge about emergency care for elderly persons.

Results: the study presents that a high percentage (60%) of the study sample was nurses as caregivers in AL- Rashad Geriatric Care Home and (80%) of the study sample are males, (60%) of the caregivers were graduated from college in AL- Cyelakh, All caregivers in the study of geriatric homes was married, with barely sufficient income. The study shows that, (90%), (70%) of caregivers in all geriatric care homes have (1-10) year of experiences respectively, (80%) of caregivers in geriatric home answers that they have emergency cases at their work time, (85%) of the emergency cases was saved in all geriatric care homes.

Conclusions: The researcher recommends to increase training courses inside and outside Iraq and encourage employees to use safety measures to avoid injuries of the elderly, and prepare the advanced medical facilities to promote saving lives. As well as a medical test and evaluation of all elderly in geriatric care home to identify their health problems which lead to emergencies.

Keywords: Health; medical treatment; emergency; patients; physiological changes.

Introduction

Population ageing can lead to larger number of individuals with physical, emotional disorders, which

increases demand for caregivers. In Brazil, there is high prevalence of functional disability in adults and variability between the genders, with (42.8%) rate among women and (39.6%) among men. Functional incapacity among older adults directly interferes in their family, since their dependence Activity of Daily living (ADL) requires presence of caregiver⁽¹⁾.

The elderly are old age, World Health Organization considers the age of elderly begins at oldness of sixty-five and above usually the activity of individuals at this

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stage and their bodies are weak and consider themselves unproductive after they were basis for tender. All things reflected negatively on their health and mental state, begin the stage of anxiety, thinking about the future and what contains⁽²⁾.

The percentage of elderly, in world population is predictable to increase rapidly from 9.5% in 1995 to 20.7% in 2050 and 30.5% in 2150. Amongst the elderly, number of people aged 80 and more will increase rapidly over time. According to projections, number of those aged 80 and above will rise seventeen fold from 61 million in 1995 to 1054 million by 2150.⁽³⁾

Elderly people at higher risk of cardiac complications in short and long terms. Common morbidity (including diabetes and osteoporosis) forms treatments. Supportive care plays key role, it is suggested to use promoter factor to colonize granule more often than younger patients. Quality of life and maintenance status may be important than survival without progress⁽⁴⁾.

Dizziness and imbalance among most common complaints of elderly, they are growing concern for public health because they put elderly at great risk of falling. Although causes of dizziness in older people are multiple factors, peripheral vestibular weakness is one of the most common causes. Benign neoplasm is most common form of vestibular weakness in the elderly, followed by mental disease.⁽⁵⁾

Malnutrition is common but under-diagnosed condition in elderly associated with physical and mental weakening, decreased quality of lifecycle, and mortality. Malnutrition disproportionately affects elderly, results from combination of changes related to aging, comorbidities, medications, and environmental factors⁽⁶⁾.

Method

In order to obtain an accurate data and representative sample, purposive Non – probability “ sample consists of (20) caregivers men and women are considered, selected purposively from geriatric care homes at government geriatric care home; (10) caregivers men and women are from Al Cyelakh; (10) caregivers men and women from AL-Rashad (governmental elderly care home). The instrument constructed according to subject (knowledge) which concerned physiological changes and health problem for elderly to achieve the aims of study, the instrument was deal of four parts.

First part: General information about geriatric home: Its include which the (Name of the House . Location (Kark, and Rusafa) . Number of caregiver. Specialty of caregiver (doctor, nurse, social worker, psychologist).

Second part: General information about caregiver

This part is concerned the with General information for caregiver which consist of

Third part : Knowledge of health caregivers about Health problems of elderly: Part four concerned the with Knowledge of health caregivers about Health problems of elderly consist of (10) items it was rated according to Likert scale which a: know (3), not sure (2), Not know (1) score. Included (constipation, visual impairment, and chronic health conditions such as (diabetes, blood presser, cancer), malnutrition, impaired hearing, sensory disability, lost their balance because of muscle weakness, urinary incontinence, Inactivity due to arthritis and loss of muscle tone and elasticity, memory loss (Alzheimer's).

Statistical Analysis: Statistical programs SPSS (Statistical Package for Social Science) version 20 and Excel application were used to analyze the data. Frequencies, Percentages and Mean of Scores were used in tables in order to get the total results of the sample and to make a comparison between the variables.

$$1. \% = \frac{\text{Frequencies}}{\text{Sample size}} \times 100$$

$$2. \text{ Arithmetic Mean } (\bar{X})$$

$$\bar{x} = \frac{\sum xi}{n}$$

$$3. \text{ C. SD : Stander Deviation}$$

$$S^2 = \sum |x - \mu|^2 / n - 1$$

4. Pearson correlation coefficient was used to find out the relationship between two variables and to determine the direction as well as the strength of this relationship.

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n(\sum x^2) - (\sum x)^2][n(\sum y^2) - (\sum y)^2]}}$$

Results and Findings

This presents the research subject which is explained in details through the analysis of its variables' data and organized systematically in tables in a form to be compatible with the research objectives.

Table (1): General Information of the Study Geriatric Home No=20

Variables		AL-Cyelakh/NO.=10		AL- Rashad/NO.=10	
		F	%	F	%
Specialtyof caregivers	Doctor	2	20%	1	10.0
	Nurse	4	40%	6	60.0
	Social worker	3	30%	3	30.0
	Psychologist	1	10%		
Total		10	100%	10	100.0
		Yes	No	Yes	No
1- Cooperationwitha healthinstitution, hospitalorhealthcenter		√		√	
2- Isthere an ambulanceDedicatedtothe house		√		√	
3- Isthere a Carsalvageor a policestationnearby			√		√
4- Isthere ahospital near tothehouse		√		√	
5- Are the medicalsuppliesavailable		√			√
6- Doesthe Houseprovide anyfinancialsupport		√		√	
7- Isthere aspecialistdoctor whoPeriodicvisits the house			√	√	
8- Doyouhavevisitsfromcivilsocietyorganizations orvoluntarycharitycampaigns			√	√	
9- Isthere ahomopharmacyinthehouse		√		√	
10- Aretherenightguardsorpolices member at theentrance tothebuilding(24hours)		√		√	

Table (1): presents that a high percentage (60%) of the study sample was nurses as caregivers in AL- Rashad Geriatric Care Home, (40%) of caregivers in AL- Cyelakh (government geriatric care home) were nurses, (20%) were doctors work in AL- Cyelakh GCH,(10%) were doctors work in AL- Rashad GCH.

Table (2): General Information of Caregiversin Geriatric Home No=20

Variables	Classification	AL- Cyelakh		AL-Rashad
		F	%	%
Year ofexperiences	1-10 years	9	90.0	70.0
	11-20			30.0
	21-30	1	10.0	
Trainingcourserelatedtofirstaid	Yes	3	30.0	10.0
	No	7	70.0	90.0
Haveyougotemergencycases	Yes	7	70.0	80.0
	No	3	30.0	20.0
More commonemergency Cases (yes only)	Dyspnea	5	71.4	25.0
	Chocking	2	28.6	25.0
	Fainting			25.0
	Falls			25.0
	Fracture			

Variables	Classification	AL- Cyelakh		AL-Rashad
		F	%	%
Dealingtheemergencycases	Save	6	85.7	87.5
	Notsave	1	14.3	12.5
Number of emergency cases	1-2 cases	10	100.	100.0
	3-5 cases			

Table (2) : shows that, (90%), (70%) of caregivers in the study in all geriatric care homes have (1-10) year of experiences respectively, high percent of them not trained for first aid in allgeriatric care homes, high percent (70%), (80%) of caregivers in geriatric home answer have emergency cases that occurred at their work time, in AL-Cyelakh, AL-Rashad, geriatric care homes respectively, and the more common emergency cases which happened were (71.4%) in AL- Cyelakhitwas

Dyspnea, (25%) of cases was dyspnea, chocking, fainting, and falls in AL-Rashad geriatric care home, the percentage of dealing the emergency cases was saved in all geriatric care homes which were (85%).

(87.5%), respectively, in all geriatric care homes was saved emergency cases, the number of emergency cases which occur in geriatric care home study was (1-2) cases at four study homes.

Table (3): Knowledge of Health Caregivers about Physiological Changes and Health Problems of Geriatrics

No.	Items	AL-Cyelakh			AL- Rashad		
		Ass.	SD.	M.	Ass.	SD.	M.
1	Constipation	1.50	.70	M.	1.50	.707	M.
2	Visualimpaired	1.70	.67	M.	1.70	.674	M.
3	Chronichealth	1.40	.69	M.	1.40	.699	M
4	Malnutrition	1.40	.84	M.	1.40	.843	M.
5	Poorhearing	1.50	.84	M.	1.50	.849	M.
6	Sensorydisability	1.50	.84	M.	1.50	.84	M
7	Losttheirbalance	1.70	.82	M.	1.70	.823	M
8	Urinaryincontinence	1.60	.84	M.	1.60	.843	M
9	Inactivity	1.50	.84	M.	1.50	.849	M.
10	Lossofmemory (Alzheimer's)	1.60	.84	M.	1.60	.843	M
	Totalmean	1.5		M.	1.5		

Low≤1.00, middle =1.1-1.9, high=2-3

Table (3) : Shows The valuation of caregiver Knowledge about physiological changes and health problems of geriatric which presented that the level of caregiver knowledge was moderate according to total mean which (1.5) for AL- Cyelakh, AL- Rashad geriatric care homes respectively.

Discussion of the Study Results

- 1. Discussion of the Information of the Study Geriatric Home which are included in present study (Table 1):** The researcher included geriatric care homes in Bagdad City which are AL- Rashad and Al Cyelakh in AL-Rusafa, The information of

homes was (60%) of the study sample was nurses as caregivers in AL- Rashad Geriatric Care Home, (40%) of caregivers in AL- Cyelakh (government geriatric care home) were nurses, (20%) were doctors+ work in AL- Cyelakh GCH, (10%) were doctors work in AL- Rashad GCH. **Moreira, et al⁽¹⁾** stated in their study which was conducted on (60) caregivers to evaluate the effectiveness of an learning intervention on knowledge-attitude and practice of elderly caregivers in Brazil, they present a study that the nurse can be a key element for a comprehensive care for elderly persons and a confident effect on the care.

2. **Discussion of General Information of Caregivers in Geriatric Home (table 2):** High percent of caregivers who working in geriatric care home in the present study have shown that, (90%), (70%) of caregivers in the study in all geriatric care homes have (1-10) year of experiences respectively, high percent of them not trained for first aid in all geriatric care homes, high percent (70%), (80%) of caregivers in geriatric home answer have emergency cases that occurred at their work time, in AL-Cyelakh, AL-Rashad, geriatric care homes respectively, and the more common emergency cases which occurred were (71.4%) in AL- Cyelakh it was Dyspnea, (25%) of cases was dyspnea, chocking, fainting, and falls in AL-Rashad geriatric care home, the percentage of dealing the emergency cases was saved in all geriatric care homes which were (85%), (87.5%), respectively, in all geriatric care homes was saved emergency cases , and the number of emergency cases which occur in geriatric care home study was (1-2) cases at four study homes.

The researcher believes that the saving emergency cases of elderly due to found ambulance in geriatric home to transport the elderly to emergency unite to near hospital .

Close, J. et al,⁽⁷⁾ stated in their report, that the incidence between 2012-2013 of adults older than 65 who sought emergency care was 12 per 100 persons for injury and 36 per 100 for illness, according to the CDC. The most common complaints that bring elderly patients to emergency departments are falls, abdominal pain, difficulty breathing, fever, chest pain, confusion or other cognitive issues, according to experts .

Vieira, et al⁽⁸⁾ stated in their study that (28-35%) of elderly people (≥ 65 years) fall each year worldwide

and prevalence increases with age process . Falls are the chief cause of injury, injury related frailty, and death in elderly people. The severity of subsequent injuries varies, and (40%-60%) of falls result in major lacerations, fractures, or traumatic brain injuries. A longitudinal study found that (68%) of people who fall reported approximately injury; healthcare was wanted in (24%) of cases, functional weakening was reported by (35%), and social and physical activities were reduced for more than (15%). Close to (95%) of completely hip fractures are caused by falls.

Kramarow, et al,⁽⁹⁾ stated in their report that 55% of all unintentional accidental deaths among adults aged 65 years or over were caused by falls, and the mortality rate of age-adjusted falls in 65-year-olds more than doubled from 29.6 per 100,000 to 56.7 per 100,000.

3. **Discussion of the Knowledge of Health Caregivers about Physiological Changes and Health Problems of Geriatrics (Table 3):** Through the evaluation of caregivers' knowledge about physiological changes and health problems of geriatrics, the researcher found the caregiver have moderate knowledge about physiological changes and health problems of geriatrics, which clear through the total mean which of (1.5), (1.5) for AL- Cyelakh, AL- Rashad geriatric care homes respectively.

Barbara, et al,⁽¹⁰⁾ stated in their study that the knowledge and skills of caregivers, is basic for caregivers to do correct decisions solve problems, and consider the foundation for developing and improving their skills

Soraas, et al,⁽¹¹⁾ and Goyal, P. et al⁽¹²⁾ reported that geriatric care home persons are at height risk of adverse events. These individuals are predominantly vulnerable due to their age, cognitive impairment, complex several diseases, and non-specific performance of illnesses. There is also an increased risk of fall injuries and errors due to many medication and potential drug interactions, and they originate that the use of eight or more drugs is recurrent in Norwegian geriatric care homes, leading to increased danger of drug-drug interactions, which in turn may lead to falls, cognitive impermanent, medication-related problems, and even increased death . In geriatric care homes, physicians frequently recommend drugs without a proper clinical evaluation of the elderly and staff may not be alert of this.

The researcher believed that the caregivers who did

not participate in the training course related to geriatric care is may be caused for low knowledge.

Conclusions

After reviewing the interpretation of the study findings, the study can conclude that:

Most of the caregivers who work in geriatric care home in the present study have years of experience between (1-10) years; High percent of the caregivers did not participate in training courses for being related to first aid for emergency cases; High percent of emergency cases occurs in in AL- Rashad, in AL- Cyelakh GCH; More common emergency cases which occurs in all geriatric care homes were: dyspneafalls, fracture, and fainting; Majority of emergency cases which occur in geriatric care homes is saving; and One to two emergency cases occur in the all geriatric care homes.

Ethical Clearance: The Research Ethical Committee at scientific research by ethical approval of both MOH and MOHSER in Iraq.

Conflict of Interest: Non

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