

## Effectiveness of Instruction Program on Caregiver Knowledge concerning Emergency Care for Geriatrics at Geriatric Home in Baghdad City.

فاعلية البرنامج الإرشادي في معارف مقدمي الرعاية حول العناية الطارئة للمسنين في دور المسنين في مدينة بغداد

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### المستخلص

**الهدف :** تهدف الدراسة إلى تقويم معارف مقدمي الرعاية المتعلقة بعناية الحالات الطارئة للمسنين وإيجاد العلاقة بين معارف مقدمي الرعاية والمستوى التعليمي وسنين الخدمة والدورات التدريبية

**المنهجية:** أجريت الدراسة شبه التجريبية في دور المسنين في مدينة بغداد للفترة من ١٤ تشرين الأول ٢٠١٨ إلى ٢٠ آذار ٢٠١٩ وذلك لإيجاد فاعلية البرنامج الإرشادي في معارف مقدمي الرعاية حول العناية الطارئة للمسنين. اختيرت عينة غير احتمالية غرضية تكونت من (٣٠) من مقدمي الرعاية من النساء والرجال. واختيرت العينة من أربع من دور المسنين في مدينة بغداد، وتم استخدام استبانة لرصد المعارف لجمع بيانات مقدمي الرعاية وتألفت من جزئين الجزء الأول يتعلق بالمعلومات الديموغرافية لمقدمي الرعاية، والجزء الثاني يضم محورين تكون من (٤٨) فقرة تتعلق بمعارفهم حول التغيرات الفسيولوجية والمشاكل الصحية وكذلك معارفهم حول العناية الطارئة لكبار السن. تم تحديد مصداقية الاستبانة من خلال عرضها على (١٠) خبراء وتم استخدام البرنامج الإحصائي للعلوم الاجتماعية الإصدار ٢٠ لتحليل البيانات من خلال تطبيق التحليل الوصفي والاستدلالي

**النتائج:** كشفت نتائج الاختبار القبلي لمقدمي الرعاية في دور المسنين الحكومية والأهلية أن معارف مقدمي الرعاية حول التغيرات الفسيولوجية والمشاكل الصحية وكذلك العناية بالحالات الطارئة كانت ذات نسبة مئوية متوسطة، في حين أظهرت نتائج ما بعد الاختبار أن معارف مقدمي الرعاية حول التغيرات الفسيولوجية والمشاكل الصحية وكذلك العناية بالحالات الطارئة قد تحسنت بسبب التأثير الإيجابي للبرنامج الإرشادي عليهم، وتوصلت الدراسة بوجود علاقة بين فاعلية البرنامج الإرشادي في معارف مقدمي الرعاية والمعلومات الديموغرافية المتمثلة بالجنس والعمر، والحالة الاجتماعية والدخل الشهري والسكن، بينما وجدت الدراسة علاقة ذات دلالة إحصائية بين فاعلية البرامج الإرشادي وسنوات الخبرة، والمستوى التعليمي وعدد الدورات التدريبية وحدثت الحالات الطارئة في مستوى  $P \leq 0.05$

**التوصيات:** أوصت الدراسة بزيادة الدورات التدريبية لمقدمي الرعاية داخل وخارج العراق وتشجيعهم على استخدام إجراءات السلامة لتجنب إصابات كبار السن.

**الكلمات المفتاحية:** فاعلية، برنامج تعليمي، مقدمي الرعاية، معارف، دور المسنين، مسنين

### Abstract

**Objectives:** The aim of the study is to evaluate the information of caregivers concerned emergency care for the elderly and to identify the relationship between caregiver information and their educational level, years of service and training courses.

**Methodology:** A quasi-experimental study was conducted in the Geriatric Care Home in Baghdad City (the governmental and private geriatric care home) for the period from October, 14th, 2018 to March, 20th, 2019 to find the effectiveness of the instructional program on caregivers knowledge about emergency care for the elderly.. A purposive sample (non-probability) was consisting of (30) males and females caregivers, the sample was selected from geriatric care home in Baghdad city. To implement the program an instrument was used to collect caregiver's data which consist of two parts: The first part concerns demographic information for caregivers. and the second part involves two domains involving (48) items concerning caregiver knowledge about physiological changes and health problems and their knowledge about emergency care for older persons. The instrument was authenticated by through a panel of ten expert. The researcher used SPSS version 20 to analyze the data, and applying the descriptive and inferential statistical analysis.

**Results:** The results of the pre-test for caregivers in a government and private geriatric care home revealed that caregivers' knowledge about physiological changes and health problems as well as emergency care was moderate, while post-test results showed that caregivers' knowledge about physiological changes and health problems as well as emergency care had improved to high level because of the positive impact of the instruction program. The study founded that there was correlation between the effectiveness of the instruction program on caregiver knowledge, and the demographic information including gender, age, social status, monthly income and race. The result of study retreaded that there were a significant relationship between the effectiveness of the instruction program and the caregiver years of experience, the educational level, the training courses and the occurrence of emergencies at  $P \leq 0.05$ .

**Recommendation:** The study recommends to increase the training courses inside and outside Iraq for caregiver and encouraged them to use safety measures to avoid the injury of elderly persons.

**Keywords:** effectiveness, instructional program, caregivers, knowledge, geriatric home, elderly

**Introduction:**

The World Health Organization (WHO) considers that the age of the elderly begins at sixty-five and above, and usually the activity of individuals at this stage and their bodies are weak and consider themselves unproductive. They think that they become dependent on society in general and on their families in particular, and all these things reflected negatively on their health and mental state, and begin the stage of anxiety and thinking about the future and what it contains<sup>(1)</sup>.

Population ageing can lead to a larger number of individuals with physical and emotional disorders, which increases the demand for caregivers. In Brazil, 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. Functional incapacity among older adults directly interferes in their family, since their dependence in Activities of Daily living (ADLs) requires the presence of a caregiver, older adults have special healthcare services needs that can make their caregiver more complicated. More than half of adults age 65 years and older have 3 or more health problems, such as heart disease, diabetes, arthritis, Alzheimer's disease, or high blood pressure, falls, syncope, fractures. Caring for older people with multiple health problems can be tricky, even for caregiver professionals who specialize in Geriatrics homes<sup>(2&3)</sup>.

In the period (2012-2013), 55% of all unintentional accidental deaths among adults aged 65 years or over were caused by falls. Between 2000 and 2013, 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. In 2012-2013, the death rate from suffocation increased more than 8

times among adults aged 85 years and over (26.5 per 100,000) compared to adults aged 65-74 (3.1 per 100,000). Among adults over the age of 65 and over, the death rate from fire was more than twice that of non-black Latino adults, as was the case for Hispanic adults. The mortality rate among motorists aged 65 years and above was 1.7 times higher in non-metropolitan areas than in urban among Spain country<sup>(4)</sup>.

The prevalence of breathlessness, medically known as dyspnea, in the general elderly population vary between 9% to 59%, with a higher prevalence in older populations and in women. A large national primary care study found that one in three people seen by their family practitioner with breathlessness was over 75 years old. Common cardio-respiratory conditions such as cancer, chronic non-malignant lung disease, and heart failure increase in prevalence with age and are common causes of breathlessness. During the period 2007-2010 in the United States of America, there were 2214 deaths among persons aged 65 years due to suffocation from food (choking)<sup>(5)</sup>

**Methodology:**

**Design of the Study :** pre quasi-experimental design study is carried out to evaluate the effectiveness of an instruction program on caregivers' knowledge concerning emergency care of elderly in geriatric home in Baghdad City. The study was initiated (at October, 14<sup>th</sup>, 2018, to March, 24<sup>th</sup>, 2019).

**Setting of the Study:** The study was conducted in a geriatric home in Baghdad City which as (Al Cyelakh GCH, AL-Rashad GCH, AL-Rahama, and AL-Enayah AL-Elahyah Geriatric care home)

**Sample of the Study:** A non-probability sample consists of (30) caregiver works in Four geriatric home, which is selected

throughout the use of probability sampling approach from Al Cyelakh GCH, AL-Rashad GCH, AL-Rahama, and AL-Enayah AL-Elahyah Geriatric care home

**Instrument:** The study instrument was constructed based on references related to study problem to reach the objectives of the study, which consist of four part, the first deals the information of geriatric homes, second part deals the socio-demographic of caregiver, third part consist of (10) items related to knowledge about the physiological, and health problems of elderly, and the fourth part deals the practical items related to management of emergency cases, which consists of ( 48 ) items.

**Validity:** The validity of the Instrument and the Instruction program had been achieved

by 10 experts from different scientific branches having at least 9 years of experience in their field of work mean of experiences

**Reliability of the Instrument :** The reliability of instrument was (0.84) by using Cronbach's alpha, this present is high.

**Statistical Methods:** Statistical methods was used to analyze the data through descriptive data analysis that included frequencies, percentages, in addition to inferential data analysis.

**Ethical Consideration:** The topic of the present study was presented to the scientific and moral committee at the college of nursing and the approval of the sample collection sites was obtained and the approval of the participants in the study was obtained

## Results:

**Table (1): Distribution of the Sample According to Geriatric Care Home (GCH)**

Variables		AL- Cyelakh / NO.=10		AL- Rashad/ NO.=10		AL- Rahama/ NO.=4		AL-Enayah AL-Elahyah NO.6		Total	
		F	%	F	%	F	%	F	%	F.	%
Specialty of caregivers	Doctor	2	20	1	10.0					3	10.0
	Nurse	4	40	6	60.0			3	50	13	43.4
	Social worker	3	30	3	30.0	2	50.0	2	33.4	10	33.3
	Psychologist	1	10			2	50.0	1	16.6	4	13.3
<b>Total</b>		10	100	10	100.0	4	100	6	100	30	100.0

**F: frequency; % percentage**

Table (1): presents that a high percentage (43.4%) of the study sample was nurses as caregivers, (33.3%) of caregivers were social worker, and(13.2%) psychologist. (10%) were doctors .

Table (2): Socio-Demographic Information for Health Caregivers N=30

variable	Classification	AL- Cyelakh		AL- Rashad		AL-Rahama		AL-Enayah AL-Elahyah		Total	
		F	%	F	%	F	%	F	%	F	%
Gender	Male	8	80.0	6	60.0	2	50.0	٢	33.0	18	59.4
	Female	2	20.0	4	40.0	2	50.0	٤	67.0	12	40.6
Age	19-28 years	2	20.0	2	20.0			١	16.6	5	16.5
	29-38	3	30.0	4	40.0	1	25.0	٢	33.4	10	33.0
	39-48	4	40.0	4	40.0	2	50.0	٢	33.4	12	39.6
	49 & above	1	10.0			1	25.0	١	16.6	3	9.9
Level of education	Secondary			2	20.0			1	16.6	3	9.9
	institute	4	40.0	4	40.0	1	25.0	2	33.4	11	36.3
	collage	6	60.0	4	40.0	3	75.0	3	50.0	16	52.8
Social	Unmarried	2	20.0			1	25.0	3	50.0	6	19.8
	Married	8	80.0	10	100.0	3	75.0	2	33.4	23	75.9
	Widowed							1	16.6	1	3.3
Income	Sufficient	2	20.0	4	40.0			2	33.0	8	26.6
	Barely Sufficient	6	60.0	2	20.0	1	25.0	4	67.0	13	43.4
	Not Sufficient	2	20.0	4	40.0	3	75.0			9	30.0
Living	Rural			4	40.0					4	13.3
	Urban	10	100.0	5	50.0	4	100.0	٦	١٠٠.٠	25	83.4
	In nursing home			1	10.0					1	3.3

Table (2) : shows that a high percent (59.4%) of the study sample are males more than females ,and (40.6%) females, (39.6%) of them at age (39-48) years old, (52.8 %) of the caregivers were graduated from college . All caregivers in the study of geriatric homes was married, except AL-Enayah AL-Elahyah (19.8%) of caregiver were unmarried , the income was barely sufficient in both AL-Enayah AL-Elahyah and AL- Cyelakh GCH was (43.2%) , but the AL- Rahama GCH , and AL- Rashad GCH the percentage was (30%), are not Sufficient incomes, all caregivers in Geriatric Care Homes who were included in present study were living in urban area.

**Table (3): General Information of Caregivers in Geriatric Home N=30**

Variables	Classification	AL- Cyelakh		AL-Rashad		AL- Rahama		AL- Elahyah		Total	
		F	%	F	%	F	%	F	%	F	%
Year of experiences	1-10 years	9	90.0	7	70.0	4	100.0	3	50.0	23	76.7
	11-20			3	30.0			3	50.0	6	20.0
	21-30	1	10.0							1	3.3
Training course related to first aid	Yes	3	30.0	1	10.0					4	13.3
	No	7	70.0	9	90.0	4	100.0	6	100.0	26	86.7
Have you got emergency cases	Yes	7	70.0	8	80.0	2	50.0	5	83.4	22	73.2
	No	3	30.0	2	20.0	2	50.0	1	16.6	8	26.3
More common emergency Cases( yes only)	Dyspnea	5	71.4	2	25.0			3	60.0	10	33.3
	Chocking	2	28.6	2	25.0					4	13.3
	Fainting			2	25.0			2	40.0	4	13.3
	Falls			2	25.0	1	50.0			3	9.9
	fracture					1	50.0			1	3.3
dealing the emergency cases	Save	6	85.7	7	87.5	2	100.0	5	83.4	20	66.6
	Not save	1	14.3	1	12.5			1	16.6	3	9.9
Number of emergency cases	1-2 cases	10	100.	10	100.0	4	100.0	6	100.0	30	100
	3-5 cases										

Table (3) : shows that(76.7%),of caregivers in the study in all geriatric care homes have (1-10) year of experience, high percent of them not trained for first aid in all geriatric care homes , high percent (73.2%) of caregivers in geriatric home answer have emergency cases that occurred at their work time, and the more common emergency cases which occurred were (33.3%) was Dyspnea , the percentage of dealing the emergency cases was saved in all geriatric care homes which were (66%), , and the number of emergency cases which occur in geriatric care home study was (1-2) cases at four study homes.

Table (4): Knowledge of Health Caregivers about Physiological Changes and Health Problems of Geriatrics at (pre- test) N=30

No	Items	AL- Cyelakh			AL- Rashad			AL-Rahama			AL-Enayah AL-Elahyah		
		M.	SD.	Ass.	M.	SD.	Ass.	M.	SD.	Ass.	M	SD	Ass.
1-	Constipation	1.50	.70	L.	1.50	.707	L	1.25	.500	L	1.83	.983	M
2-	visual	1.70	.67	M.	1.70	.674	M	1.25	.500	L	1.83	.983	M
3-	chronic health	1.40	.69	L.	1.40	.699	L	1.25	.500	L	1.83	.983	M
4-	malnutrition	1.40	.84	L.	1.40	.843	L	1.50	.577	L	1.66	1.03	L
5-	poor hearing	1.50	.84	L.	1.50	.849	L	1.25	.500	L	1.66	1.03	L
6-	sensory	1.50	.84	L.	1.50	.84	L	1.25	.500	L	1.83	.983	M
7-	lost their	1.70	.82	L.	1.70	.823	M	1.25	.500	L	1.83	.983	M
8-	urinary	1.60	.84	L.	1.60	.843	L	1.50	.577	L	1.83	.983	M
9-	Inactivity	1.50	.84	L.	1.50	.849	L	1.25	.500	L	1.83	.983	M
10	loss of Memory	1.60	.84	L.	1.60	.843	L	1.25	.500	L	1.83	.983	M
	<b>Total mean</b>	<b>1.5</b>		<b>L.</b>	<b>1.5</b>		<b>L</b>	<b>1.3</b>		<b>L</b>	<b>1.8</b>		<b>M</b>

**Low≤1.66, middle =1.67-2.33, high=2.34 -3**

Table (4) : shows the evaluation of caregiver Knowledge about physiological changes and health problems of geriatric at pre – test which presented that the level of caregiver knowledge was low according to total mean which of (1.5), (1.5), (1.3), and (1.8) for AL- Cyelakh, AL- Rashad, AL-Rahama, and AL-Enayah AL-Elahyah geriatric care homes respectively.

Table (5): Knowledge of Health Caregivers about Geriatrics and their Health problems at post – test N=30

No.	items	AL- Cyelakh			AL- Rashad			AL-Rahama			AL-Elahyah		
		M.	SD.	Ass.	M.	SD.	Ass.	M.	SD.	Ass.	M	S D.	Ass.
1-	constipated	2.80	.421	H	2.80	.632	H	2.75	.500	H	2.50	.836	H
2-	visual impaired	2.70	.674	H	2.70	.674	H	2.75	.500	H	2.50	.836	H
3-	Have chronic health problems	2.90	.316	H	2.70	.674	H	2.75	500	H	2.66	.816	H
4-	malnutrition	3.00	.000	H	2.90	.316	H	2.75	.500	H	2.33	1.032	H
5-	poor hearing	2.70	.674	H	2.80	.632	H	2.75	500	H	2.66	.816	H
6-	sensory disability	2.80	.632	H	2.80	.632	H	2.50	577	H	2.66	.816	H
7-	Loss their balance	2.60	.843	H	2.90	.316	H	2.75	500	H	2.66	.816	H

8-	urinary incontinence	2.70	.674	H	2.70	.674	H	3.00	.000	H	2.66	.816	H
9-	Inactivity	2.60	.843	H	2.90	.316	H	2.75	.500	H	2.66	.816	H
10	memory loss	2.70	.674	H	2.70	.674	H	2.75	.500	H	3.00	.000	H
	Total mean	2.75		H	2.79		H	2.75		H	2.6		H

Low≤1.66, middle =1.67-2.33, high=2.34 -3

Table (5) shows the evaluation of caregiver Knowledge for physiological changes and health problems of geriatric at post – test which presented that the level of caregiver knowledge was high according to total mean which of (2.75), (2.79), (2.75), and (2.6) for AL- Cyelakh, AL- Rashad, AL-Rahama, and AL-Enayah AL-Elahyah geriatric care homes respectively .

**Table (6): Total Mean of Caregiver Responses Related to Emergency Care for Emergency Situation in Geriatric Home at Pre and Post – test**

Name of home periods	AL- Cyelakh	AL- Rashad	AL-Rahama	AL-Enayah AL-Elahyah
Pre- knowledge	1.3	1.40	1.3	1.35
	<b>M</b>	<b>M</b>	<b>M</b>	<b>M</b>
Post- knowledge	1.74	1.7	1.8	1.82
	<b>H</b>	<b>H</b>	<b>H</b>	<b>H</b>

Low= ≤ 0.6; Middle= 0.7- 1.2; High= 1.3-2

Table (6) shows the effectiveness of the instructional program on the Caregivers responses related to emergency care of situation in geriatric home at pre and post- test was improved through the changes of total mean for domains of practical knowledge must be applied during emergency situation which of (1.3, 1.40, 1.30, and 1.35) at pre- test to (1.7, 1.74,1.8, and 1.82) at post test for AL- Cyelakh, AL- Rashad, AL-Rahama, and AL-Enayah AL-Elahyah geriatric care homes - respectively.

**Table (7): Relationship between the effectiveness of Instruction Program and Caregiver level of Education, Year of Experiences, Training Course, and Occurrence of emergency cases in AL-Enayah AL-Elahyah Geriatric Home**

	Variables'	Mean	N	SD	t. test	df	Sig. P≤0.05
1	Level of Education	4.3333	6	.81650	-20.471	5	S.
	Effectiveness of Program	93.6667	6	10.21111			
2	Year of Experiences	1.5000	6	.54772	-21.279	5	S.
	Effectiveness of Program	93.6667	6	10.21111			
3	Training Course	2.0000	6	.00000	-21.989	5	S.
	Effectiveness of Program	93.6667	6	10.21111			
4	Occurrence of cases	1.1667	6	.40825	-22.018	5	S.
	Effectiveness of Program	93.6667	6	10.21111			

N=Number; SD=standard deviation; df=Degree of freedom; sig.=Significant

Table (7): presented that there were significant relationship between the effectiveness of instruction program and year of experiences of caregiver, level of education, training course, and occurrence of emergency situation in AL-Enayah AL-Elahyah geriatric care home at P≤0.05 level.

**Table (8): Correlation between the Effectiveness of Instruction Program and Caregiver level of Education, Year of Experiences, Training Course, and Occurrence of Emergency Cases in AL- Rahama Geriatric Home**

		Level of education	Year of experiences	Training Course	Occurrences of emergency Cases	Total knowledge	Total knowledge for management of emergency situation
Level of education	Pearson Correlation	1	. <sup>a</sup>	. <sup>a</sup>	.577	.997**	.700
	Sig. (2-tailed)		.	.	.423	.003 (H.S.)	.300
	N	4	4	4	4	4	4
Year of experiences	Pearson Correlation	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>
	Sig. (2-tailed)	.	.	.	.	.	.
	N	4	4	4	4	4	4
Training course	Pearson Correlation	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>	. <sup>a</sup>
	Sig. (2-tailed)	.	.	.	.	.	.
	N	4	4	4	4	4	4
Occurrences of emergency cases	Pearson Correlation	.577	. <sup>a</sup>	. <sup>a</sup>	1	.513	.970*
	Sig. (2-tailed)	.423	.	.		.487	.030(S.)
	N	4	4	4	4	4	4
Total knowledge	Pearson Correlation	.997**	. <sup>a</sup>	. <sup>a</sup>	.513	1	.645
	Sig. (2-tailed)	.003	.	.	.487		.355
	N	4	4	4	4	4	4
Total knowledge for management of emergency situation	Pearson Correlation	.700	. <sup>a</sup>	. <sup>a</sup>	.970*	.645	1
	Sig. (2-tailed)	.300	.	.	.030	.355	
	N	4	4	4	4	4	4

N=Number; SD=standard deviation; df=Degree of freedom; sig.=Significant

Table (8) presented that there were significant relationship between the effectiveness of instructional program and level of education of caregiver, and occurrence of emergency situation in AL- Rahama geriatric care home ,and there were no significant relationship with caregiver year of experiences, training course, at  $P \leq 0.05$  level.

### Discussion:

The researcher included AL-Kark geriatric care home in Bagdad City, on 10 caregiver who works in two homes, high percentage (50%) of them were nurses works in AL-Enayah AL-Elahyah, and(50%) percentage was social and psychological researcher in AL-Rahamh home geriatric home respectively. (table 1)

In a study which was conducted on (60) caregiver to evaluate the effectiveness of an learning intervention on knowledge-attitude and practice of elderly caregivers in brazil, they present that the nurse can be a key element for a comprehensive care for elderly persons and a confident effect on the care<sup>(6)</sup>.

Present study shows that the high percent (75%) of the study sample were females more than males in AL-Enayah AL-Elahyah GCH, (% 50) was males and females in AL-Rahamh geriatric home, and (50%)(33.4%) of them at age group (39-48) years old, for both in AL-Rahamh and AL-Enayah AL-Elahyah geriatric home respectively, (75%) of caregiver have Bachelor's degree in AL-Rahamh GCH, and (50%) have collage degree in AL-Enayah AL-Elahyah GCH, (75 %) of the caregiver were married in AL-Rahamh GCH, (50%) of the caregiver was unmarried AL-Enayah AL-Elahyah GCH, (75 .0%) of the caregiver with not Sufficient income in AL-Rahamh GCH, and(75%) of the caregiver with Barely Sufficient income in AL-Enayah AL-Elahyah geriatric home, (100.0%) of

a caregiver in AL-Rahamh GCH and AL-Enayah AL-Elahyah GCH from urban area

The socio-demographic and socio-economic determinants of female caregiver burden in Cape Town, South Africa study

who conducted on (100) female caregiver their study revealed that the high percent of caregiver at aged (39-48) years, and greatest of them had no primary education<sup>(7)</sup>.

High percent of caregiver who works in geriatric care home in the present study have (1-10) years of experience which of (100%) in AL-Rahamh, (70%) AL-Enayah AL-Elahyah GCH , (10 0%) in both AL-Rahamh, and AL-Enayah AL-Elahyah GCH not trained about emergency care , (83,4%) in AL-Enayah AL-Elahyah GCH , (50%) in AL-Rahamh have emergency cases in their time of work shift , While the percentage of the common emergency cases in AL-Enayah AL-Elahyah (60%) was dyspnea , (50 %) of cases in AL-Rahamh was fracture, and falls, and (100%), (75%) of case was saved in both geriatrics homes. And the number of emergency cases monthly occur in both geriatric home is from (1-2) cases monthly. (Table 3).

In a study which concluded that ( 28-35%) of elderly people ( $\geq 65$  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 them was completely hip fractures are caused by falls.<sup>(9)</sup>

The evaluation of caregiver knowledge about physiological changes and health problems of geriatric at pre – test was moderate according to total mean which

of (1.3), (1.8), for AL-Rahamh, and AL-Enayah AL-Elahyah GCH geriatric care homes, and improved at post test for (2.75), (2.6) respectively in present study (table 4-5)

In a study to exam the knowledge and skill of caregivers, they concluded that the basic knowledge of caregivers is important to make decisions and to solve problems and improving their skills<sup>(10)</sup>.

The study presented that the effectiveness of instruction program on caregiver related to emergency care of cases in geriatric home at pre and post- test was improved through the changes of total mean for domains of practical knowledge must be applied during emergency cases which of (1.3, 1.35) at pre- test to (1.8, 1.82) at post test for AL-Rahamh, and AL-Enayah AL-Elahyah GCH geriatric care homes, respectively. (Table 6)

In a study to evaluate the effectiveness of structured education on knowledge among caregivers of stroke patients concerning stroke care. The mean and standard deviation of knowledge scores before and after structured teaching program were 13.65 + 3.16 and 20.05 + 3.36 respectively. It showed that there was significant gain in knowledge score after education program, so their education program will be beneficial in improving knowledge of the caregivers.<sup>(11)</sup>

The present findings revealed that there were significant relationship between the effectiveness of instruction program and caregiver level of education, year of experiences, training course, and occurrences of emergency situation in AL-Rahamh geriatric care homes geriatric home, and there were significant relationship between the effectiveness of instruction program and year of experiences of caregiver, and there were no significant relationship with caregiver level of education, year of experiences, training course, and occurrence of emergency situation AL-Rahamh, and AL-Enayah AL-Elahyah geriatric care homes geriatric home at  $p \leq 0.05$  level (table 7-8)

### Recommendations:

- 1- Increase training courses inside and outside of Iraq and encourage employees to use safety measures to avoid injuries to the elderly
- 2- Preparation all advance medical facilities in geriatric homes to promote saving life
- 3- Route medical test and assessment for all guest in geriatric homes.

### References:

- 1- Rémond, D.; Shahar, D.; Gille, D.; and et al.,(2015): Understanding the gastrointestinal tract of the elderly to develop dietary solutions that prevent malnutrition, **Oncotarget journal**, Vol. (6), NO.(16), p:13858–13898.
- 2- Giacomini, K.; Oliveira Duarte, Y.; Camarano, A; Nunes, D.: (2018), Care and Functional disability in daily activities, ELSI, Brazil, **Rev Saude Publica**, Vol( 52), No.(2),P 9
- 3-Moreira, A.; Silva, M.; Darder, J.; and et al., (2018): Effectiveness of an educational intervention on knowledge-attitude practice of older adults' caregivers, **Rev Bras Enferm**, Vol. (71),No.(3) p:1055-1062.
- 4- Kramarow, E.; Chen, I.; Hedegaard, H.; and et al., (2015): Deaths From Unintentional Injury Among Adults Aged 65 and Over: United States, 2000–2013, **NCHS Data Brief**. Vol(199), p:199.
- 5- Johnson, M.; Bland, J.; Gahbauer, E.; and et al., (2016): Breathlessness in the Elderly During the Last Year of Life Sufficient to Restrict Activity: Prevalence, Pattern and Associated Factors, **Journal Amercing**

**Geriatric Society**, vol.(64),No.(1), p: 73–80.

6 - Moreira, A.; Silva, M.; Darder, J.; and et al., (2017) : Effectiveness of an educational intervention on knowledge-attitude practice of older adults' caregivers, **Rev Bras Enferm Internet**, Vol.(71),No.(3) p:1055-1062.

7- Yakubu ,A.; Schutte, D.; (2018): Caregiver attributes and socio-demographic determinants of caregiving burden in selected low-income communities in cape town, South Africa, **Journal of Compassionate Health Care**, Vol.(5), No.(3), p:3.

9- Vieira, E.; Palmer,R.; and Chaves,P., (2016) : Prevention of falls in older 33-people living in the community, **BMJ**, Vol.(353), P: 1419.

10- Barbara, G.; Paula, SH.; Charles, G.; (2008): What Knowledge and Skills Do Caregivers Need, **American Journal of Nursing**, Vol. (108) No.(9), p: 28-34.

11- Anand; Sumeet , Sandhya, and et al.; (2017): Effectiveness of Education Program on Knowledge among Caregivers of Stroke Patients. **International Journal of Nursing Education** , Vol. (9), No. ( 4), p:6-11.

12- Kadam , A.; Shinde, M.; (2014): Effectiveness of Structured Education on Caregiver's Knowledge and Attitude Regarding Colostomy Care, **International Journal of Science and Research**, Vol.(3),No.(4),p:586-593.