



## Effectiveness of an Education Program on the Knowledge of the Residents of Geriatric-Care Homes about Personal Hygiene

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### ABSTRACT

**Objective(s):** Determination effectiveness of the education program on the elderly knowledge about personal hygiene and to find out the relationship between elderly knowledge and their demographic characteristics.

**Methodology:** A quasi-experimental design is done at Al Cyelakh Elderly Care, the study started from 28 April 2022 to 3 March 2023. A non-probability purposive sample of (30) elderly lived in the geriatric care home was selected for the purpose of the study. The program and questionnaire was constructed based on extensive review of literature. The instrument's reliability was determined to be (0.88) using Cronbach's Alpha. The Validity was established through (10) specialists' experts. The data were collected by direct interview and questionnaire. Data were analyzed by using (SPSS) package version 25. Descriptive data through determination of: Frequency, percentage, mean of score and standard deviation. Inferential statistical data analysis approach: used by enforcement of the ANOVA T-Test used for determining the relation between Socio-demographic characteristics and adults' knowledge.

**Results:** The elderly knowledge about personal hygiene was moderate, and no significant relationship between elderly knowledge and their demographic characteristics.

**Conclusions:** The study confirmed the effectiveness of the education program on knowledge of elderly living in Geriatric Home about their personal hygiene.

**Recommendations:** Using the program as a guide for the personal hygiene by geriatric homes residents.

Education program, Knowledge, Geriatric Home. Elderly, Personal hygiene.

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## فاعلية البرنامج الإرشادي في معارف نزلاء دور المسنين حول النظافة الشخصية

### المستخلص

**الاهداف:** تحديد فاعلية البرنامج التعليمي في معارف كبار السن حول النظافة الشخصية ومعرفة العلاقة بين المعارف والخصائص الديموغرافية والاجتماعية.

**منهجية البحث:** تم إجراء دراسة تصميم شبه تجريبية في دار رعاية المسنين في الصليخ . أجريت الدراسة للمدة من 28 نيسان 2022 الى 3 آذار 2023. وكانت العينة عشوائية (غير احتمالية) مكونة من (30) كبير في السن يعيشون داخل الدار تم اختيارهم وفقا لغرض الدراسة . تم جمع البيانات من خلال استخدام تقنية الاستبيان والمقابلة المعتمدة. تم بناء البرنامج والاستمارة الاستبائية بواسطة الباحث بالاعتماد على الدراسات السابقة ، كانت موثوقية الأداة (0,88) باستخدام معامل (كرونباخ الفا) ، وتم تحديد مصداقية الاستبانة من خلال (10) خبراء ممن لديهم خبرة في نفس الاختصاص . وتم تحليل البيانات بأستعمال برنامج SPSS النسخة (25) عن طريق الإجراءات الإحصائية الوصفية من خلال تحديد: التكرارات والنسب المئوية والوسط الحسابي والانحراف والمعياري وتحليل البيانات الإحصائية من خلال تطبيق اختبار انوفا و تي تيست لتحديد العلاقة بين الخصائص الاجتماعية والديموغرافية ومعارف كبار السن .

**النتائج:** اظهرت النتائج ان معارف كبار السن حول النظافة الشخصية كانت متوسطة , ولا توجد علاقة بين معارفهم والخصائص الديموغرافية لهم .

**الاستنتاجات:** استنتجت الدراسة بان البرنامج الإرشادي ذو تأثير ايجابي على معارف كبار السن المتعلقة بالنظافة الشخصية.

**التوصيات:** بناء على استنتاجات الدراسة ، يمكن استخدام البرنامج كدليل للنظافة الشخصية في جميع دور المسنين..

**الكلمات المفتاحية:** برنامج ارشادي ، المعارف ، دار المسنين ، كبار السن النظافة الشخصية ، كبار السن

### Introduction

The concept of cleanliness is often attributed to the Babylonians, who flourished in the 17th century B.C. in ancient Mesopotamia. During this time period, authors recognised the importance of keeping one's personal belongings to oneself and the link between unwashed hands and the transmission of disease. Hand washing. Hand hygiene refers to the process of keeping one's hands clean and germ-free. By hand, of course. Hand washing refers to the practice of disinfecting one's hands by washing them with water and normal soap or antimicrobial soap<sup>(1)</sup>

According to few studies, within 600 million individuals worldwide who were 65 years of age or older in 2000, there will be 2 billion by the year 2050. The German Federal Statistical Office estimates that 28% of people

in 2030 and 33% in 2060 will be over the age of 65<sup>(2)</sup>

Due to bad personal cleanliness, older people are more susceptible to developing infections, oral health issues, and skin diseases because accumulation of germs and bacteria . Furthermore, they are more likely to run into difficulties when performing personal care duties. Finding answers that enable elders to appear and feel their best begins with understanding why personal hygiene is so challenging for them.<sup>(3)</sup>

Body hygiene (skin care), mouth hygiene (oral care), hand cleaning (hand care), facial hygiene, fingernail and toenail care (nail care), ear, hair, and foot care, armpit and bottom care, and clothes care are among the elements of personal hygiene. According to several studies, good personal hygiene habits

include visiting the doctor and the dentist, frequently cleaning one's hands, brushing one's teeth, getting a basic manicure and pedicure, taking care of one's feminine hygiene, and eating healthy.<sup>(4)</sup>

**Objective(s):**The purpose of this study is to assess the effectiveness of the Instruction Program on the elderly knowledge about personal hygiene and to determine the relationship between residents of geriatric-care homes and their demographic characteristics.

### **Methodology**

A quasi-experimental design carried out at Al Cyelakh geriatric. The study was started from 28 April 2022 to 3March 2023. Ethical approval has been from the research ethics committee in the College of Nursing\University of Baghdad, also approval obtained. Adult participants in the study have signed consent papers indicating that they understand their participation is voluntary and that their information will be kept confidential and used solely for research purposes. Non-probability sampling methods were used to choose seniors.

Questionnaire format contents socio-demographic characteristics which

includes (age, gender, educational level, marital status, income), also the questionnaire contain knowledge about personal hygiene which includes (40) items. The data collection was through direct interview technique by researcher with participant of elderly from the 28 April 2022 to 3March 2023. The program was consist of three lectures include ( personal hygiene , effect of poor personal hygiene on health , skin care , nail care , hair care , bathing , clothing oral care )

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 .

The reliability of instrument was (0.88) by using Cronbach's alpha. Statistical programs such as SPSS (Statistical Package for Social Science) version 23and Excel .application were used to analyze the data through descriptive data analysis that included frequencies, percentages, in addition to inferential data analysis. A P-value of less than or equal to 0.05 was considered statistically significant

**Results****Table (1): Socio-Demographic Information for Elderly No=30**

<b>Variable</b>	<b>Classification</b>	<b>AL- Cyelakh</b>	
		<b>F</b>	<b>%</b>
<b>Gender</b>	<b>Male</b>	<b>16</b>	<b>53.3</b>
	<b>Female</b>	<b>14</b>	<b>46.7</b>
<b>Age</b>	<b>50-59</b>	<b>4</b>	<b>13.2</b>
	<b>60-69</b>	<b>16</b>	<b>53.1</b>
	<b>70-79</b>	<b>10</b>	<b>33%</b>
<b>Level of education</b>	<b>Reads and writes</b>	<b>5</b>	<b>16.7</b>
	<b>Elementary</b>	<b>14</b>	<b>46.7</b>
	<b>Secondary</b>	<b>6</b>	<b>20.0</b>
	<b>Institute</b>	<b>3</b>	<b>9.9</b>
	<b>College</b>	<b>2</b>	<b>6.6</b>
<b>Social status</b>	<b>Single</b>	<b>3</b>	<b>9.9</b>
	<b>Divorced</b>	<b>7</b>	<b>23.1</b>
	<b>Married</b>	<b>9</b>	<b>29.7</b>
	<b>Widowed</b>	<b>11</b>	<b>36.3</b>
<b>Income</b>	<b>Sufficient</b>	<b>5</b>	<b>16.7</b>
	<b>Barely Sufficient</b>	<b>18</b>	<b>59.4</b>
	<b>Not Sufficient</b>	<b>7</b>	<b>23.1</b>

**Freq: frequency, %: percentage**

Table show presents that the more than half percent (53.3 %) of the study sample are males. Nearly More than half of the participants were at the age group of (60-69 year old). Level of education among the study sample Was elementary among 46.7% of the participants.. The high percentage of the sample was widowed , and the income was barely sufficient where (59.4%).

**Table (2): Knowledge the Geriatric Home Residents about the Effect of Poor Personal Hygiene on the Person's Health at (pre- test) No=30**

No.	Items			
		M.S	SD.	Ass.
1-	Inadequate oral hygiene can result in tooth decay and gum disease, which can harm the heart.	1.33	0.606	L
2-	Neglectful bathing can cause a skin condition known as dermatitis neglect.	1.30	0.535	L
3-	Spreading bacteria, viruses, and parasites by not washing your hands after using the restroom, handling food, or touching unclean surfaces. They may cause infections and disorders such as food poisoning, gastroenteritis, the common cold, hepatitis A .	1.20	0.484	L
4-	Dirty and untrimmed fingernails and toenails lead to infection	1.33	0.547	L
5-	Bad breath is another effect of poor hygiene that impacts your oral health.	1.33	0.547	L
6-	Decrease showering leads to hair lice infestation	1.37	0.556	L
7-	Not trimming the nail regularly causes diarrhea and bowel disease	1.37	0.556	L
8-	Poor genital hygiene lead to urinary infection	1.43	0.568	L
9-	Poor personal hygiene results in the physical manifestations of poor health. This causes others to perceive you as a source of diseases and infections.	1.37	0.556	L
10	Wearing dirty and unclean clothes leads to skin diseases	1.37	0.556	L
	<b>Total mean</b>	1.34	0.551	L

know (3), not sure (2), not know (1) score ( 1-1.66 low , 1.67- 2.33 moderate, 2.34-3 High).

Table (2) shows the evaluation Knowledge the geriatric home residents about the effect of poor personal hygiene on the person's health was Low according to total mean which of (1.34) .

**Table (3): Knowledge the Geriatric Home Residents about the Effect of Poor Personal Hygiene on the Person's Health at Posttest No=30**

No.	Items			
		M.S	SD	Ass.
1-	Inadequate oral hygiene can result in tooth decay and gum disease, which can harm the heart.	2.13	0.860	M
2-	Not bathing can result in a skin condition called dermatitis .neglect	2.53	0.629	H
3-	Spreading bacteria, viruses, and parasites by not washing your hands after using the restroom, handling food, or touching unclean surfaces. They may cause infections and disorders such as food poisoning, gastroenteritis, the common cold, and hepatitis A.	2.53	0.776	H
4-	Dirty and untrimmed fingernails and toenails lead to infection	2.37	0.850	H
5-	Bad breath is another effect of poor hygiene that impacts your oral health.	2.43	0.817	H
6-	Decrease showering leads to hair lice infestation	2.57	0.728	H
7-	Not trimming the nail regularly causes diarrhea and bowel disease	2.47	0.776	H
8-	Poor genital hygiene lead to urinary infection	2.47	0.776	H
9-	Poor physical hygiene leads to visible markers of poor health in your body. This makes others see you as a source of infections and diseases.	2.30	0.837	H
10	Wearing dirty and unclean clothes leads to skin diseases	2.13	0.900	M
	<b>Total mean</b>	2.39	0.794	H

know (3), not sure (2), not know (1) score ( 1-1.66 low , 1.67- 2.33 moderate, 2.34-3 High).

Table (3) shows the evaluation Knowledge the geriatric home residents about the effect of poor personal hygiene on the person's health was high according to total mean which of (2.39) .

**Table (4) Effectiveness of an Instruction Program on the Knowledge of the Residents of Geriatric-Care Homes related to the Effect of Poor Personal Hygiene on the Person's Health**

DOMAIN	M.S	S.D	T. test	P .VALUE
Pre	1.34	0.551	14.968	0.000 H S
Post	2.39	0.794		

(M.S) mean of score , (S.d) standard deviation, (HS): High significant (P): significant, (T): t-test.

Table (4) demonstrates that there is a highly significant difference between the overall responses of the study sample throughout two measurement periods (pre- and post-test) and the statistical mean. In addition, the results of the study indicate that the elderly's knowledge has significantly increased between the pre- and post-tests a P-value less than 0.05.

**Table 5 : Effectiveness of an Instruction Program on the Knowledge of the Residents of Geriatric-Care Homes about the Importance of Personal Hygiene at Pre and Post - test**

Pre- knowledge	Total mean	1.25
	Levels	L
Post- knowledge	Total mean	1.70
	Levels	H

correct answer take (2) incorrect (1) The rating and scoring was (1-1.5 low , 1.56 - 2 High)

Table (5) shows the evaluation Knowledge the geriatric home residents about the importance of personal hygiene at pre and post- test was improved through the changes of total mean for domains of knowledge which of (1.25) at pre- test to (1.70 ) at post test.

## Discussion

The findings revealed that most late adults are at the age (60-69) years old; this result is agreed in the study is carried-out among older Koreans founded the mean age of the participants was  $73.01 \pm 60$  years<sup>(5)</sup> another study who reported that more than two third of old age are constituted (70.76%) of old age 60 to less than 75 years<sup>(6)</sup>.

More than half of the study sample are males and Widowed , this result agreed with study that found that the majority of

the population in both the intervention and control groups was male more than half of the sample was Widowed<sup>(7)</sup> .

The evaluation of elderly Knowledge about the affection of poor personal hygiene on the person's health at pre – test was low according to total mean which of (1.34), and improved at post- test for (2.39). This finding of the current study comes along with a study the knowledge was low according to the total mean score per test (1.23) and the majority of the studied items had a high mean score (1.77 and 1.70) on

post-test I and post-test II following program implementation. In addition, the evaluation of patients' knowledge in the control group across two measurement periods reveals a very modest shift in the mean<sup>(8)</sup>.

The study presented that the effectiveness of instruction program on elderly related to important of personal hygiene at pre and post- test was improved through the changes of total mean for domains of knowledge which of (1.25) at pre- test to (1.70 ) at post test for Al Cyelakh . The current findings are also supported by another study were significant differences at (P- value $\leq$  0.01) between pretest, posttest I and posttest II. Compared to the control group, significant differences were identified between the results of the first test administered before the implementation of the program and the two tests administered following its implementation<sup>(9)</sup>.

The study was conducted to assess the effectiveness of instruction program about personal hygiene the result show that effecte of program on the elderly knowledge and provied good information for the geriatric care home about personal hygiene.

## Conclusions

The study conclude that change in the elderly knowledge about personal hygiene and know the effect of poor personal hygiene on health. and provide good information for the geriatric care home about personal hygiene. The researcher concluded that the instruction program was effective in the enhancement of elderly knowledge about personal hygiene.

## Recommendations

- 1-The program used a guide line for the personal hygiene in all geriatric care homes.
- 2-Preparation of all facilities in the geriatric care homes to do the personal hygiene such as ( soap, toils , alcohol ).

## Conflict of Interest

None.

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