

Educational Program for Caregivers Regarding Elderly Abuse in Port Said City

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ABSTRACT

Background: As a widespread and significant issue on a worldwide scale, elderly abuse is becoming more widely acknowledged. Elderly people who live with relatives may be more susceptible to abuse, including financial, psychological, and physical abuse, given that the majority of occurrences of elderly abuse take place inside households. **Aim:** to assess the effect of educational program for caregivers regarding elderly abuse in Port Said City. **Subjects and method: Design:** using a quasi-experimental study design with a pre/post-test technique for one group. **Setting:** The research was conducted in five primary health care Centers in Port Said City. **Subjects:** 67 caregivers from multistage cluster sample made up the study's participants. **Tools:** A main tool was used consisting of three parts: Caregivers socio-demographic characteristics, caregiver's knowledge of elderly abuse, caregivers reported practice regarding elderly abuse. **The Results:** This recent study shown that (82.1%) of the studied caregivers had very good knowledge, and (80.65) of them had satisfactory practice post program with positive relationship ($p = 0.028^*$) between caregiver's knowledge and practices after program. **Conclusion:** Elderly abuse was decreased as a result of the educational program and there were significant difference between caregiver's knowledge and reported practice after program intervention related to feeding, mobility, and treatment. **Recommendations:** Develop an awareness programs for older adults and their caregivers about elderly abuse, its consequences, and how to deal with it.

Key words: Caregiver, Educational program, Elderly, Elderly abuse.

INTRODUCTION

Elderly abuse is acknowledged as a serious global issue by World Health Organization (WHO) and International Elderly Abuse Prevention Network (Almakki, Alshehri, & Abdel Wahab, 2020). Elderly abuse is a persistent issue in the world, and its incidence is rising. One in six elderly adults worldwide experiences some form of abuse. There are considerable variations in the occurrence of elderly abuse, with documented rates from Peru (79.7%) to Ireland (2.2%). Elderly abuse was estimated to be prevalent in the Eastern Mediterranean area at 43.7% and in Iran at 14.7 % (Yon, Mikton, Gassoumis, & Wilber, 2017).

A study of the incidence of elderly abuse in Egypt's Mansoura Region revealed that it was 46% prevalent, with neglect (40.5%) being the most prevalent form of abuse in cities, followed by (30.5%) of psychological abuse, financial abuse (27.5%), physical abuse (9.5%) (El-khawaga, Eladawi & Abdel-Wahab, 2021). According to the WHO, elderly abuse is "a single or repeated act or lack of appropriate behavior occurring within a trusting relationship that causes harm or distress to an older person" (WHO, 2021). According to the Center of Disease Control, it is "a deliberate action or omission of action by a caregivers or other person in a trusting relationship that harms, or causes the risk of harming, an older person" (CDC, 2021).

Physical, psychological, sexual, financial, and neglect are different types of elderly abuse (WHO, 2020). Physical abuse can take the form of forceful handling, pinching, striking, or slapping while receiving care. Verbal assaults, threats, intimidation, insults, or harassment used to inflict fear, suffering, or distress is known as emotional abuse. Less commonly, elderly adults are victimized by rape and other forms of sexual abuse. Financial Abuse, Elderly persons are frequently taken advantage of by inappropriately or illegally acquiring, utilizing, and manipulating the money, interests, belongings, property, or assets of defenseless elders without their consent. Some elderly persons experience neglect as a result of their caregivers' failure to provide for their basic needs such food, housing, clothes, cleanliness, and activities of daily life (Orfila et al., 2018).

Social isolation, functional disability, mental or personality disorders, cognitive impairment, caregiver's exhaustion and dissatisfaction are the main risk factors for elderly

abuse. Elderly abuse is linked to a number of negative impacts, such as: decreased quality of life, bad health effects, social isolation, and an increased mortality risk. From 672 million in 2005 to approximately 1.9 billion in 2050, the number of individuals over 60 will probably nearly triple globally (Chalise & Basnet, 2017).

Caregivers are either paid or unpaid members of an individual's public network who help with daily life activities. Because they lack any official training, they are frequently referred to as informal caregivers. Family members, partners, or friends who offer a variety of unpaid services to patients with chronic diseases can all be considered informal caregivers. Specialized medical care, organizing and planning care, patient health monitoring, ensuring treatment or medication compliance, preventing adverse events, and support with daily living tasks are all common responsibilities of caregivers (Lambert et al., 2017).

Educational sessions and awareness-raising activities were crucial in educating the public about elderly abuse. Increasing awareness is a crucial preventative measure that not only aids in the learning of new knowledge but also modifies attitudes and behaviors. One aspect of reducing abuse and neglect is providing senior caregivers with social assistance (Phelan, 2018). Successful community-level training and education were the first step in developing successful treatments against elderly abuse. In order for people to know where to turn for assistance when cases of elderly abuse arise, there is a necessity to establish and advance in education, training, and community resources within communities, particularly rural ones (Ries & Mansfield, 2020).

Community health nurses are crucial in combating elderly abuse and identifying victims of actual and potential mistreatment of the elderly. Assessment and screening, direct care, obligatory and mandatory reporting, as well as the ability to prevent and provide initial intervention to protect older people are all current nursing roles in the recognition and management of elderly abuse. Additionally, nurses can offer support and refer patients to other healthcare providers (Mohamed, 2020).

Significance of the study

By 2050, there will be 2 billion people in the globe who are 60 or older, which means that as the population ages, there will be a rise in elderly abuse instances, with 320 million victims globally (WHO, 2021). An investigation about the incidence of elderly

abuse in Egypt's Mansoura District revealed that it was 46% widespread, with neglect (40.5%) being the most prevalent form of abuse in cities, followed by psychological abuse (30.5%), economic abuse (27.5%), Physical abuse (9.5%) (El-khawaga, Eladawi, & Abdel-Wahab 2021).

In our nation, caregivers could not have access to enough knowledge regarding elderly abuse, which would cause them to act unintentionally and unhealthily when taking care of family members who are older. There are few studies on the results of awareness workshops for senior caregivers in regard to elderly abuse in Egypt since there is little research analyzing changes in knowledge and practice on the subject ; the study aim was to assess the effects of educational program for caregivers regarding elderly abuse.

AIM OF THE STUDY

The study aims to assess the effect of educational program for caregivers regarding elderly abuse in Port Said City.

Objectives

1. Define of knowledge of caregivers regarding elderly abuse.
2. Identify reported practice of caregivers regarding elderly abuse.
3. Design educational program for caregivers regarding elderly abuse.
4. Implement educational program for caregivers regarding elderly abuse.
5. Evaluate the effect of educational program for caregivers regarding elderly abuse knowledge and practice.

Research hypothesis

After the implementation of educational program caregiver's knowledge and practice about elderly abuse will be improved.

SUBJECT AND METHOD

A. Technical design

Research design

A quasi-experimental research design with one group Pre/Post-test approach.

Study setting

Five primary health care Centers in Port Said City were used for this study. Osman Ibn Afan from El-Zohour district, Bank El-Eskan from El- Dawahy district, El-Arab health care center from Al-Arab district, El-Manakh health care center from El-Mankhah district and El -Arab unit from El- Shark district .All of the health facilities listed is connected to Egypt health care authority hospitals in Port Said governorate.

Subjects

A multistage cluster sampling technique was used.

Sample size

The sample size was calculated using g power software with power .95 and significant level 0.001 and effect size 0.60 (Hsieh, Wang, Yen & Liu, 2009) given 67 participants (Faul, Erdfelder, Lang & Buchner, 2007).

Inclusion criteria

Male and female aged from 18 years and more.

Tools for data collection

One main tool (structure interview questionnaire sheet) was used for data collection in this study which included three parts as follow:

Part (I): socio-demographic characteristics for caregivers

Developed by El-Amrosy (2013) and adopted by researchers, the socio demographic characteristics of caregivers as (age, gender, educational level, marital status, occupation, relationship between caregivers and older adults).

Part (II): knowledge of caregivers about elderly abuse

Developed by El-Amrosy (2013) and adopted by researchers. It included 36 multiple-choice questions about age-related changes in older adults (10 questions about physiological changes and 4 questions about social, psychological, behavioral, and neurological changes). Elderly special needs (6 questions) and elderly abuse (16 questions).

Scoring system

Caregivers knowledge responses consisted of points (0–2) to rate the level of general knowledge. An incorrect answer is 0 points, an incomplete answer is 1 point, and a correct answer is 2 points. The total score of the caregiver's general knowledge about elderly abuse, etc. was calculated by 72 correct answers, and the caregiver's general knowledge was stratified into the following three categories. Poor Knowledge Less than 50% of total score (< 36 points), Good knowledge (50% to less than 75% of total score (36 to < 54 points)), Very good (> 75% of total score) total score (54:72 points).

Part III: Caregiver reported practice regarding elderly abuse:

Developed by Mohamed (2020), and adapted by the researcher to collect data related to caregiver reported practice regarding elderly abuse, which was it include (8 points): feeding, bathing, wearing, use the toilet, mobility, treatment, playing sports, and family kinship and social events.

Scoring system

Reported practice regarding elderly abuse scores included 3 scores which were: always 2 score, sometimes 1 score, and rarely 0 score. Total practice score =56. The overall score of practice was measured satisfactory if the score >60% and measured unsatisfactory if it was <60%.

B- Operational design

The present study was concluded the following phases:

Preparation phase

This includes reviewing relative and recent literature about the research topic, various studies, and theoretical knowledge on several aspects of the problem with scholarly books, articles, journals, and official websites for data collection.

Content Validity

It was done by a panel of three experts in the field of family and community nursing to review the tool for clarity, relevance, comprehension, completeness, and applicability. Minor changes were made when editing the tool.

Reliability

Knowledge questionnaire reliability was applied. The tool verified to be highly reliable ($r. = 0.8$). Caregivers-reported reliability of practice was measured using Cronbach's alpha (0.89).

Pilot study

Prior to the start of the study, a pilot study was conducted with 7 caregivers representing 10% of the sample. They were chosen at random between early December 2021 and January 2022 in order to evaluate the feasibility of the study and determine how much time would be required to complete it. Changes were made in response to the findings of interviews. In the research sample, caregivers who took part in the pilot study were not included.

Field of work

Beginning in early November 2021 and ending in late October 2022, the research was performed over a 12-month period. The first five months are used to obtain administration approvals, conduct pilot study, and revise tools and brochures. The next five months are used to gather data and implement the program, and the final two months are used for data input and statically analysis. The study was passed over the next phases:

Phase (I): Assessment

After preparing the research tools, we recruited the study sample by visiting primary health care centers and collecting 67 samples. Subjects were divided by researchers into 21 groups according to the number of caregivers present at each primary care center, with each group consisting of her 3–4 participants. A pre-tested questionnaire was presented to the study sample to assess existing knowledge levels and reported practices regarding elderly abuse.

Phase (II): Planning phase

Built on the acquired information from primary assessment, besides literature, the health educational program was designed by the researcher and a booklet for caregivers was prepared, which cover all items related to elderly abuse.

Program development

The program of study was planned based on needs of knowledge and learning requirements, and it was intended to be practical. Additionally, it was created using the data from the pre-test questionnaire, and the programmer was created using the findings from the literature review and the interviewing questionnaire.

Objectives of program

An educational program aimed at improving caregiver's knowledge and practice regarding elderly abuse in the light of needs identified in the pre-test assessment.

The educational program

The educational program consists of three phases:

- **First phase:** was assessment of caregiver's knowledge regarding elderly abuse.
- **Second phase:** was analysed of the pre-test to detect caregiver's needs at knowledge about elderly abuse.
- **Third phase:** implementation phase.

Educational devices: lecture and discussion.

Educational aids: booklet, boosters and lab top.

Phase (III): Implementation of the program:

The planned educational program was implemented at primary health care Centers in Port Said City, which are connected to hospitals by the Egypt Health Care Authority in the Egyptian governorate of Port Said. From 10:00 am to 1:00 pm, the researcher was presented at the health care center until the recommended sample size was attained. From the beginning of April 2022 until the end of August 2022, one day per week was set for data collecting at each center. There were 21 groups, which were split up based on how many caregivers were present at each center.

Every Sunday in April 2022, the researcher visited Osman Ibn Afan center for continuous 4 weeks and conducted the program with 15 participants divided into 5 groups. Every Monday in May 2022 the researcher visited El-Mankhah center within 4 weeks and conducted the program with 12 participants divided into 4 groups. Starting in June 2022, the researcher visited El –Arab health care Center every Sunday for an additional 4 weeks and conducted the program with 14 participants divided into 4 groups. Starting in July 2022, the researcher visited El-Arab unit every Tuesday for continuous 4 weeks and conducted the program with 12 participants divided into 4 groups. The researcher visited Bank El-Eskan center every Monday in August 2022 for 4 weeks and conducted the program with 14 participants divided into 4 groups.

All educational program sessions were managed by researcher at the Primary Health Care Centers of Port Said City, which is connected to the Egypt health care authority hospitals of Port Said Governorate, who have extensive expertise in the field of health education. For each set of subjects, the programmer was executed. Each group had a programmer with one session that ranged in length from 30 to 45 minutes. The researcher presented himself to the study sample at the beginning of the session and spent around 5 minutes discussing the purpose, goals, and objectives of the study. Then, the participants were given a research instrument to use as a pre-test. This part of the session took about 10 minutes.

The researcher explained the educational program, which took about 25 min divided into two mini lectures; the first one was on (ageing, age related changes, special needs of elderly) and the second mini lecture was on elderly abuse (definition, causes,

Signs and symptoms, risk factor and consequences of elderly abuse, prevention and management) and each one of the mini lecture took about from 10-15 minutes to implement. After that the same study tools was given to the participants as post-test to assess their level of understanding in 10 minutes.

A variety of teaching techniques, including mini-lectures, open discussions, questions, power point presentations, and demonstrations, were used to focus on the program's learning objectives. Brochures and laptop slide presentations were utilized as teaching material to illustrate the educational program. A helpful illustrated booklet created by the researcher was given to the participants.

Phase (IV): Evaluation phase

To determine the effect of the educational program for caregiver's about knowledge and practice of elderly abuse, a post-test was carried out using the same tools as the pre-test.

C- Administrative design

Prior to starting the study, the Director of Port Said universal Health Insurance Authority received an official letter from the Dean of the faculty of Nursing at Port Said University outlining its goals. Each participant in the research provided verbal informed permission before the first interview.

Ethical considerations

To get authorization to conduct the study Approval was taken from the Scientific Research Ethics Committee in the Faculty of Nursing at Port Said University, the goal of the study was explained to the director of the primary health care center .Each participant must also be made aware of the significance of participation. A brief overview of the study ensures the participant that the data will be kept private and used only for the objectives of the study. It also lets the participant know that they have the right to leave the study at any time.

D. Statistical design

With the use of SPSS software (Statistical Package for Social Sciences, version 23, SPSS Inc. Chicago, IL, USA), the collected data were arranged, tabulated, and statistically analyzed. The Kruskal-Wallis test was used to compare more than two groups, and the Wilcoxon signed-rank test (z) was used to compare two groups using counts and percentages (frequency). Rice paddock. After calculating the mean and standard deviation, two sets of parametric data were compared using the p-value of the paired t-test (t) and the p-value of a nova test (f). A minimum of two sets of parametric data are now available. The chi-square test was performed to compare the two groups and find any differences. For a statistically significant interpretation of the significance test findings, significance was determined to be $p < 0.05$. To check for relationships between variables, the Spearman's correlation test was used.

RESULTS

Table (1): Shows the distribution of caregivers according to personal characteristics, the present results revealed that (34.3%) of the studied sample being in the age group (30 to < 40 years) with total mean age ± 40.56 . 88.1% of the studied samples were female. According to caregiver relation to elderly (52.2%) of them was elderly's sons and daughters. 79.1% of caregiver were married. In relation to educational level (46.3%) of caregiver had higher education and (44.8%) of them were employed.

Table (2): Shows the distribution of the caregiver's knowledge according to physiological changes of elderly pre and post intervention. The recent findings demonstrated that, there was a noticeable improvement of caregivers' knowledge in all items of physiological changes after intervention compared to before intervention. Generally, highly significant difference was found between before and after intervention for the caregiver knowledge about physiological changes of elderly ($P \leq 0.001$), as the present of total score of correct answers pre intervention was (10.4 %) while post intervention was (89.5%).

Table (3): Shows the distribution of caregiver's knowledge about social, behavioral, psychological and neurological changes of elderly pre and post intervention. The current findings described a marked improvement in the caregivers' level of knowledge after intervention compared to before intervention , as presented, they had

correct answers post intervention regarding neurological , psychological ,social and behavioral changes (82.1%, 77.6%, 76.1% and 65.7%) respectively, with highly significant difference ($P \leq 0.001$) between pre and post intervention, as total score of correct answers pre intervention was only (9.0%) while post intervention was (74.6%).

Table (4): Indicate the distribution of caregiver's knowledge about types of abuse occurred to elderly pre and post intervention, which states a clear improvement post intervention in caregiver's knowledge about types of financial, sexual, physical, neglect and emotional abuse (61.2%, 71.6% 76.1%,76.1% and 83.6%) respectively compared to pre intervention. The result illustrates highly statistically significant difference ($P \leq 0.001$) between pre and post intervention regarding types of elderly abuse.

Table (5): Shows the distribution of caregiver's knowledge about sign, symptoms and consequences of elderly abuse pre and post intervention. There was a marked improvement in all items of caregiver's knowledge about sign, symptoms and consequences of elderly abuse, as only (7.5%) of the study sample had correct answers pre intervention which improved to (79.1%) of them had correct answers post intervention. Highly statistically significant difference ($P \leq 0.001$) found in all items of caregiver knowledge

Figure (1): illustrates that (73.1%) of the studied caregivers had poor knowledge pre intervention, while (82.1%) of them had very good knowledge post intervention.

Table (6): Shows the distribution of all caregivers' reported practices regarding elderly people before and after the intervention. A highly statistically significant difference between all items of caregivers' reported practices pre and post intervention ($P \leq 0.001$).

Table (7): Show correlation matrix between total score of caregiver's knowledge and reported practices after program intervention. The result illustrated that there was positive relationship between caregiver's knowledge and reported practices after program intervention ($r = 0.291, 0.170, 0.085, 0.020, 0.240, 0.298, 0.047$ and 0.105) respectively for feeding, bathing, wearing, using toilet, mobility, treatment, Playing sports and family kinship and social events. With statistically significant for total practice ($p=0.028$).

Table (1): Distribution of caregiver according to personal characteristics (n=67).

Variable	Caregiver (n=67)	
	N	%
Age in Years		
20: <30	15	22.4
30: <40	23	34.3
40: <50	18	26.9
50: <60	11	16.4
Mean ± SD 40.56		
Gender		
Male	8	11.9
Female	59	88.1
Care giver Relation to elderly		
Son/daughter	35	52.2
Wife/husband	8	11.9
Sister/ brother	1	1.5
Son's wife	20	29.9
Other; (friends-neighbors)	3	4.5
Marital status		
Single	10	14.9
Married	53	79.1
Widowed	2	3.0
Divorced	2	3.0
Educational level		
Illiterate	1	1.5
Read and write	4	6.0
Primary education	2	3.0
Secondary education	28	41.8
Higher education	31	46.3
preparatory education	1	1.5
Occupation		
Not work	28	41.8
Worker	1	1.5
Employee	30	44.8
Business man	7	10.4
Farmer	1	1.5

Table (2): Distribution of caregiver's knowledge according to physiological changes of elderly pre and post intervention (n=67).

Items	Pre-intervention		Post-intervention		Z	P
	N	%	N	%		
Skin						
Incorrect answers	35	52.2	8	11.9	4.701	0.001*
Incomplete answers	18	26.9	5	7.5		
Correct answers	14	20.9	54	80.6		
Eye						
Incorrect answers	31	46.3	4	6.0	4.711	0.001*
Incomplete answers	25	37.3	5	7.5		
Correct answers	11	16.4	58	86.5		
Ear						
Incorrect answers	38	56.7	14	20.9	4.116	0.001*
Incomplete answers	14	20.9	3	4.5		
Correct answers	15	22.4	50	74.6		
Digestive system						
Incorrect answers	42	62.7	6	9.0	5.427	0.001*
Incomplete answers	18	26.9	4	6.0		
Correct answers	7	10.4	57	85.0		
Respiratory system						
Incorrect answers	25	37.3	4	6.0	4.041	0.001*
Incomplete answers	29	43.3	3	4.5		
Correct answers	13	19.4	60	89.5		
Cardiovascular system						
Incorrect answers	41	61.2	17	25.4	3.795	0.001*
Incomplete answers	17	25.4	2	3.0		
Correct answers	9	13.4	48	71.6		
Urinary system						
Incorrect answers	46	68.7	9	13.4	5.642	0.001*
Incomplete answers	13	19.4	4	6.0		
Correct answers	8	11.9	54	80.6		
Muscular system						
Incorrect answers	42	62.7	7	10.4	5.466	0.001*
Incomplete answers	19	28.3	3	4.5		
Correct answers	6	9.0	57	85.1		
Hormones						
Incorrect answers	23	34.3	8	11.9	2.887	0.004*
Incomplete answers	43	64.2	6	9.0		
Correct answers	1	1.5	53	79.1		
Immunity						
Incorrect answers	37	55.2	7	10.4	4.867	0.001*
Incomplete answers	26	38.8	2	3.0		
Correct answers	4	6.0	58	86.6		
Total score						
Incorrect answers	40	59.7	5	7.5	5.604	0.001*
Incomplete answers	20	29.9	2	3.0		
Correct answers	7	10.4	60	89.5		

*Significant (P<0.05) ** Highly Significant (P≤0.001) Z= Wilcoxon Signed Ranks test.

Table (3): Distribution of caregiver's knowledge about social, behavioral, psychological and neurological changes occurred of elderly pre and post intervention (n=67)

Items	Pre-intervention		Post-intervention		Z	P
	N	%	n	%		
Social changes						
Incorrect answers	48	71.6	11	16.4	7.321	0.001*
Incomplete answers	10	15	5	7.5		
Correct answers	9	13.4	51	76.1		
Behavioral changes						
Incorrect answers	38	56.7	15	22.4	4.008	0.002*
Incomplete answers	23	34.3	8	11.9		
Correct answers	6	9.0	44	65.7		
Psychological changes						
Incorrect answers	44	65.7	9	13.4	7.239	0.001*
Incomplete answers	16	23.9	6	9.0		
Correct answers	7	10.4	52	77.6		
Neurological changes						
Incorrect answers	30	44.8	7	10.4	6.915	0.001*
Incomplete answers	33	49.2	5	7.5		
Correct answers	4	6.0	55	82.1		
Total score						
Incorrect answers	31	46.2	3	4.5	6.368	0.001*
Incomplete answers	30	44.8	14	20.9		
Correct answers	6	9.0	50	74.6		

*Significant ($P < 0.05$)** Highly Significant ($P \leq 0.001$)
Signed Ranks test

Z= Wilcoxon

Table (4): Distribution of caregiver's knowledge about types of abuse occurred to elderly pre and post intervention (n=67)

Items	Pre-intervention		Post-intervention		Z	P
	N	%	N	%		
Types of physical abuse						
Incorrect answers	30	44.8	11	16.4	3.657	0.001*
Incomplete answers	25	37.3	5	7.5		
Correct answers	12	17.9	51	76.1		
Types of financial abuse						
Incorrect answers	35	52.2	14	20.9	3.656	0.001*
Incomplete answers	26	38.8	12	17.9		
Correct answers	6	9.0	41	61.2		
Types of emotional abuse						
Incorrect answers	43	64.2	7	10.4	5.55	0.001*
Incomplete answers	19	28.3	4	6.0		
Correct answers	5	7.5	56	83.6		
Types of neglect abuse						
Incorrect answers	46	68.7	11	16.4	5.154	0.001*
Incomplete answers	18	26.8	5	7.5		
Correct answers	3	4.5	51	76.1		
Types of sexual abuse						
Incorrect answers	64	95.5	15	22.4	7.821	0.001*
Incomplete answers	2	3.0	4	6.0		
Correct answers	1	1.5	48	71.6		

*Significant (P<0.05)

** Highly Significant (P≤0.001)

Z= Wilcoxon

Signed Ranks test

Table (5): Distribution of caregiver's knowledge about sign, symptoms and consequences of elderly abuse pre and post intervention (n=67).

Items	Pre-intervention		Post-intervention		Z	P
	N	%	N	%		
Financial signs and symptoms						
Incorrect answers	45	67.2	13	19.4	5.947	0.001*
Incomplete answers	14	20.9	6	9.0		
Correct answers	8	11.9	48	71.6		
Neglect signs and symptoms						
Incorrect answers	53	79.1	6	9.0	5.864	0.001*
Incomplete answers	12	17.9	3	4.5		
Correct answers	2	3.0	58	86.5		
Physical signs and symptoms						
Incorrect answers	41	61.2	15	22.4	5.246	0.001*
Incomplete answers	23	34.3	1	1.5		
Correct answers	3	4.5	51	76.1		
Emotional signs and symptoms						
Incorrect answers	43	64.2	7	10.4	4.621	0.001*
Incomplete answers	22	32.8	1	1.5		
Correct answers	2	3.0	59	88.1		
Sexual signs and symptoms						
Incorrect answers	43	64.2	12	17.9	2.335	0.021*
Incomplete answers	18	26.8	13	19.4		
Correct answers	6	9.0	42	62.7		
Consequences of elderly abuse						
Incorrect answers	27	40.3	14	20.9	3.347	0.002*
Incomplete answers	33	49.3	3	4.5		
Correct answers	7	10.4	50	74.6		
Total score of knowledge about elderly abuse						
Incorrect answers	43	64.2	9	13.4	5.923	0.001*
Incomplete answers	19	28.3	5	7.5		
Correct answers	5	7.5	53	79.1		

*Significant (P<0.05)

** Highly Significant (P≤0.001)

Z= Wilcoxon Signed

Ranks test

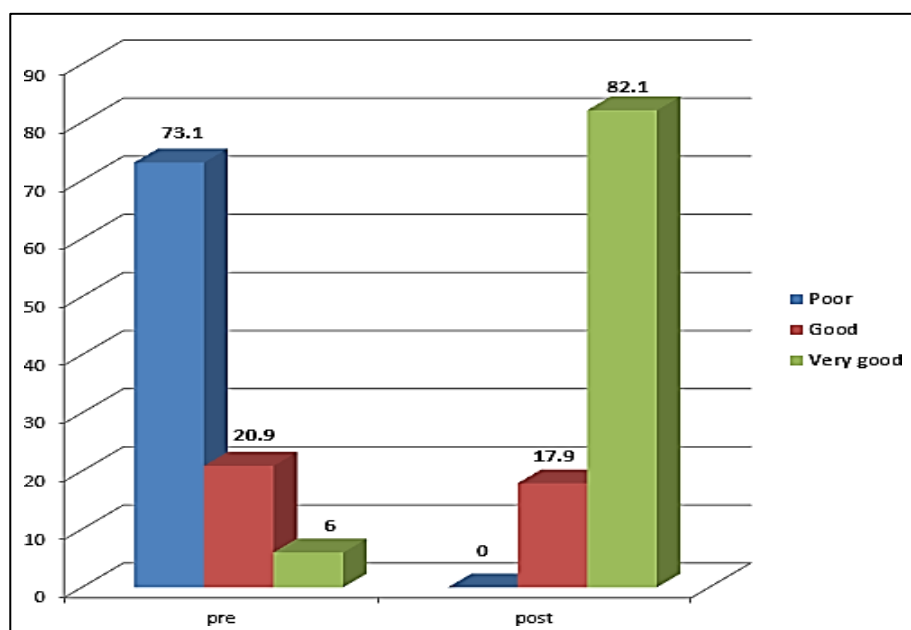


Figure (1): Caregiver's knowledge about elderly abuse on pre and post program intervention

Table (6): Distribution of total caregiver's reported practices about elderly abuse on pre and post program (n=67).

Variables	Pre-intervention		Post-intervention		Z (P)
	Unsatisfactory	Satisfactory	Unsatisfactory	Satisfactory	
Feeding	61(91.0)	6(9.0)	12(17.9)	55(82.1)	6.861 (0.001*)
Bathing	44(65.7)	23(34.3)	16(23.9)	51(76.1)	4.320 (0.001*)
Wearing	25(37.3)	42(62.7)	14(20.9)	53(79.1)	2.524 (0.012*)
Using toilet	12(17.9)	55(82.1)	6(9.0)	61(91.0)	2.449 (0.014*)
Mobility	31(46.3)	36(53.7)	24(35.8)	43(64.2)	2.111 (0.035*)
Treatment	53(79.1)	14(20.9)	4(6.0)	63(94.0)	7.001 (0.001*)
Playing sports	38(56.7)	29(43.3)	17(25.4)	50(74.6)	3.772 (0.002*)
family kinship and social events	52(77.6)	15(22.4)	21(31.3)	46(68.7)	4.841 (0.001*)
Total	48(71.6)	18(28.4)	13(19.4)	54(80.6)	4.193 (0.001*)

*Significant (P<0.05) ** Highly Significant (P≤0.001) Z= Wilcoxon Signed Ranks test

Table (7): Correlation matrix between total score of caregiver's knowledge and reported practices after Program Intervention (n=67).

Caregiver's reported practice	Total score of caregiver's knowledge
Feeding	r = 0.291 p =0.017*
Bathing	r = 0.170 p =0.168
Wearing	r = 0.085 p =0.492
Using toilet	r = 0.020 p =0.872
Mobility	r = 0.240 p =0.049*
Treatment	r = 0.298 p =0.014*
Playing sports	r = 0.047 p =0.708
family kinship and social events	r = 0.105 p =0.396
Total practice	r = 0.268 p =0.028*

*Significant (P<0.05)

spearman's correlation

DISCUSSION

Elderly abuse is associated with long-term, disabling psychological symptoms, such as anxiety, sadness, and suicidal thoughts, as well as a higher chance of hospitalization, long-term institution placement, and even death. The patient's quality of life and result suffer when elderly abuse is detected too late (Mercier et al., 2020).

Community health nurses should get involved in discovering service options for aged persons and in instructing general community in the problems of older individuals and their caregivers. These objectives can be partially met by designing and providing educational programs or by supporting for legislation designed to assist elder independence and elder caregivers whenever possible (Rosen et al., 2019). Therefore, that the current study aimed to assess the effect of educational program for caregivers regarding elderly abuse in Port Said City.

Concerning level of caregivers' knowledge pre and post program regarding physiological changes occurred to elderly, the present results showed an obvious improvement of caregivers' knowledge in all items of physiological changes post program compared to preprogram. Generally, highly significant difference was found between pre and post program intervention for the caregiver knowledge about physiological changes of elderly ($P \leq 0.001$). Moreover, there was marked improvement in the studied caregivers' level of knowledge concerning to social, behavioral, psychological and neurological changes post program intervention compared to pre - program intervention with highly significant difference ($P \leq 0.001$)

This finding was in line with Fathy (2021) who studied "Psycho-educational program for enhancing quality of life for elderly" in Cairo, Egypt, and demonstrated that there was a highly statistically significant improvement between before and after program implementation concerns knowledge about physiological changes for the study subjects ($p < 0.01$). All knowledge correlated to physical, emotional, mental, and social changes was improved after implementing the program. This result may be due to the high educational level of the caregiver which makes them more interested in receiving knowledge about changes occurred to elderly and make the intervention more effective .

Concerning knowledge of studied caregivers regarding elderly abuse, the current results reported, there was a marked improvement with highly significant statically difference in knowledge level related to types of elderly abuse. As evidence, the majority of the studied caregivers had correct answers post program intervention related to physical, financial, emotional, neglect and sexual abuse. This result in line with Mydin, Yuen, and Othman (2021) they studied "The effectiveness of educational intervention in improving caregivers' knowledge about elderly abuse and neglect" in Malaysia and found there was significant differences with p-value (< 0.001) between before and after educational intervention regarding caregivers' knowledge level in several parts of elderly abuse, such as definitions, signs and symptoms, types ,risk factors, management, diagnostic and communication skills, and ethical and legal responsibilities. This may be due to nearly half of the caregiver are female who have no work which enable them spend more time with the elderly.

The existing findings illustrated a marked improvement with highly significant statically difference in knowledge level related to signs, symptoms and consequences of

elderly abuse post implementation of educational program. This result in agreement with Ejaz, Rose, and Anetzberger (2017) who studied "Development and implementation of online training modules on abuse, neglect, and exploitation" in Cleveland, Ohio and found improvements in caregivers' knowledge about signs and symptoms of abuse and its consequences. As of viewpoint of the researcher this might be due the majority of caregiver have a close relationship and emotional ties with the elderly.

Regarding total knowledge score about elderly abuse pre and post program among the studied caregivers, the present result shown that an obvious improvement in caregiver's total knowledge. Nearly three quarters of the caregivers had poor knowledge around elderly abuse preprogram, while this finding improved after implementation of the educational program and become the most of them had very good knowledge.

These findings in line with Dianati, Azizi-Fini, Oghalae, Gilasi, and Savari, (2019) who studied "The impacts of caregivers' education on perceived abuse among hospitalized elderly people" in Iran and demonstrated that the post-test mean score of all subscales of elderly abuse were significantly greater than the corresponding pretest mean scores ($P = 0.001$); and described that these results indicated there was a significant increase in knowledge level of caregivers under the study after educational intervention which led to improvement in study subjects practice regarding elderly abuse. This result reflects the importance of providing educational intervention to caregivers for improving their knowledge, attitude and practice that reflect on the elderly health.

Regarding caregiver's reported practices of elderly abuse pre and post program, the existing results clarified that a noticeable improvement with high statistically significant difference in caregivers' practices post implementation of the educational program regarding feeding, bathing, wearing clothes, using the toilet, mobility, treatment, playing sports, family kinship, and social events of elderly. As the present results showed the most of the subjects had satisfactory practice level post program.

Interpretation supported by the study conducted by Ab-Ghani, Makhtar, Elias, Ahmad, and Ludin (2022) who studied "knowledge, practice and needs of caregiver in the care of older people" in Malaysia and discussed that family caregivers are anticipated to help their elder relatives through performance of daily living activities , avoiding falls and senior mistreatment. Generally, they play a vital role in mental,

psychosocial and sometimes economic assist of elder family relatives who are incapable of caring for themselves. Possible explanation for this finding may be that the elder adult hadn't the ability to do ADLS without help from their caregivers and caregiver were still in the active age group appropriate for caring for the elderly.

The present results showed a significant relationship between caregiver's knowledge and practice after program intervention among the studied caregivers, ($r = 0.291, 0.170, 0.085, 0.020, 0.240, 0.298, 0.047$ and 0.105) respectively for feeding, bathing, wearing, using toilet, mobility, treatment, Playing sports and family kinship and social events. With statistically significant for total practice ($p=0.028$). This result indicates that when caregivers level of knowledge increases, caregiver's practices improved.

This result was supported by Mohamed (2020) who conducted a study in Benha, Egypt entitled "Knowledge and practice of caregivers regarding elderly abuse" and reported that there was a statistically significant relation between the studied caregivers' knowledge level and their reported practices regarding elderly abuse. In addition, a study conducted by Mohammed, Ahmad, & Farahat (2022) entitled "Assessment of Knowledge and Practices Regarding Elderly Care among Elderly Care Givers at Geriatric Homes" and found that there was highly statistically significant correlation between knowledge score with practice score when P-value was $< 0.001^{**}$. This result may be duo to applying posttest immediately after providing educational program regarding elderly abuse.

CONCLUSION

In light of the improvement in caregiver's knowledge and practice regarding elderly abuse; the studied caregivers had poor knowledge pre intervention, while the majority of them had very good knowledge post intervention with highly statistically significant difference ($P \leq 0.001$) was found in all knowledge items .There was an obvious improvement in the studied caregivers' practices after implementing the educational program. There was positive relationship between caregiver's knowledge and reported practices after program intervention. The educational program had a positive outcome and improvement on the elderly caregiver's knowledge and reported practices which lead to reducing elderly abuse.

RECOMMENDATIONS

- Develop an awareness program for elderlies and their caregivers about elderly abuse and its consequences and how to deal with it.
- Design posters about how to improve well-being of both caregiver and elderly.
- Encourage family caregivers to share their experiences and ask for support.

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برنامج تعليمي لمقدمي الرعاية تجاه سوء المعاملة لكبار السن في مدينة بورسعيد

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الخلاصة

يتزايد الاعتراف بإساءة معاملة المسنين كقضية واسعة الانتشار وخطيرة على نطاق عالمي ؛ قد يكون كبار السن الذين يشاركون السكن مع مقدمي الرعاية أكثر عرضة لسوء المعاملة ، بما في ذلك الإساءة المالية والنفسية والجسدية ، بالنظر إلى أن غالبية حالات إساءة معاملة المسنين تحدث داخل الأسر. **الهدف:** تهدف الدراسة الحالية إلى تقييم تأثير برنامج تعليمي لمقدمي الرعاية تجاه سوء المعاملة لكبار السن في مدينة بورسعيد. **التصميم:** تم استخدام تصميم بحث شبه تجريبي مع مجموعة واحدة قبل / بعد الاختبار. **المكان:** تم إجراء البحث في خمسة مراكز للرعاية الصحية الأولية في مدينة بورسعيد. **العينه:** تألفت موضوعات الدراسة من عينة عنقودية متعددة المراحل من ٦٧ من مقدمي الرعاية. **الادوات:** تم استخدام أداة رئيسية واحدة مكونه من ثلاثة أجزاء على النحو التالي ؛ الخصائص الاجتماعية والديموغرافية لمقدمي الرعاية ، ومعلومات مقدمي الرعاية حول إساءة معاملة المسنين ، والممارسة المبلغ عنها لمقدمي الرعاية فيما يتعلق بإساءة معاملة المسنين. **النتائج:** معظم مقدمي الرعاية (٨٢.١%) الذين شملتهم الدراسة تحسن مستوى المعرفة لديهم بعد تنفيذ البرنامج التعليمي، كما أوضحت النتيجة أن (٨٠.٦٥%) منهم تحسن لديهم مستوى الممارسة بعد تنفيذ البرنامج التعليمي مع وجود علاقة ايجابية (* (p = 0.028) فيما يتعلق بمستوى المعرفة و الممارسة لدى مقدمي الرعاية قبل وبعد تنفيذ البرنامج التعليمي. **الخلاصة:** خلصت الدراسة الي وجود تأثير إيجابي للبرنامج التعليمي علي تحسين المعرفة والممارسات لدى مقدمي الرعاية لكبار السن ويؤدي هذا بدوره الى انخفاض نسبة حدوث سوء المعاملة لكبار السن. **التوصيات:** أوصت الدراسة بتقديم برامج توعية لكبار السن وذويهم من مقدمي الرعاية لهم حول اساءة المعاملة لكبار السن وعواقبها وكيفية التعامل معها.

الكلمات المرشدة: مقدمي الرعاية ،برنامج تعليمي ، كبار السن ، إساءة معاملة كبار السن.