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Original Article

Elder abuse: Types, risk factors and its effect on quality of life among institutional and non-institutional elderly population in Cairo, Egypt

Community Medicine

Dalia S. Abdo[1], Somaya MA. Lashin[1], and Ashwak S. Mohammad[1]

[1] Community and Occupational Medicine Department, Faculty of Medicine for Girls, Cairo, Al-Azhar University, Egypt.

ABSTRACT

Background: Elder abuse is an intentional mistreatment of individuals aged 60 years and above, including physical, sexual, psychological, economic, social abuse and negligence. It is a complex phenomenon, and various factors contribute to its occurrence. Elder abuse can have severe consequences, such as depression, isolation, frustration and institutionalization. It also has detrimental effects on elders' quality of life.

Objective: To identify different types of elder abuse, determine its associated risk factors, and assess elders' quality of life.

Methodology: This is an analytical cross-sectional study conducted at 22 geriatric homes and 8 social insurance offices randomly selected from North, South, East, and West Zones of Cairo governorate on a total sample of 500 elders. A cluster random sample from geriatric homes was taken from each zone proportionally allocated to the number of its included districts. Consequently, non-institutionalized elders were chosen by a systematic random sample technique from social insurance offices adjacent to randomly selected districts. Data were collected using interviewer-administered valid and reliable questionnaires.

Results: Elder abuse has occurred among 69.4% of the studied sample in the previous 12 months of the interview. Psychological abuse was the predominant type of abuse followed by self-negligence; then economic, physical, social, and sexual abuse. Elders who were single, staying in geriatric homes, illiterates and had insufficient income were more likely to be abused. Logistic regression revealed that being currently not working men or housewives, and living alone were independent predictors of elder abuse. Elder abuse was found to have an inverse relationship with quality of life and its domains.

Conclusion: Elder abuse is a relevant public health problem. Various risk factors are implicated to its occurrence and it has detrimental effects on elders' quality of life. Successful preventive and management measures across the family, community, and institutional contexts are needed.

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Keywords: Elder abuse; institutional and non-institutional elderly; quality of life; risk factors.

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Corresponding author: Dalia Salem Abdo, Community and occupational medicine department, faculty of medicine for girls, Cairo, Al-Azhar university, Egypt. **Tel.:**01223107953**. E-mail:** daliasalem.medg@azhar.edu.eg, dalia8810@yahoo.com

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INTRODUCTION

Elders are those people who are aged 60 years and above [1]**.** Their number is growing faster than other age groups due to reduction in mortality rates from chronic diseases and increased life expectancy [2].

In 2015, the global population aged 60 years and above represented 12.0% of the world's population and was projected to be 22.0% by 2050 [2]. In Egypt, the number of elders accounted for 6.6% of the total population [3] and was forecasted to be 17.9% by 2052 [4].

Population aging was expected to result in higher rates of elder abuse [5] which is defined as a single, or repeated act, or lack of appropriate action, occurring within any relationship where there is an expectation of trust which causes harm or distress to an older person [6].

The global prevalence of elder abuse was 64.2% for institutionalized elders [7] and 15.7% in non-institutional settings [8]. It affects almost one in six elders [6]. In Egypt, the recorded prevalence of elder abuse was 65.0% in geriatric home setting [9] and 52.0% in community setting [10].

Risk factors of elder abuse were categorized into different levels including individual (victim and or perpetrator), victim–perpetrator relationships and community and socio-cultural levels [11].
Elder abuse is associated with wide range of negative health outcomes such as injuries, disabilities, long-term psychological problems, suicide attempts, and increased risk of hospitalization, institutionalization and premature death [12]. It also undermines elders' quality of life [13].

There is less available data describing elder abuse issue in Egypt [14]. So, there is a need for further research. Accordingly, this study was conducted to identify different types of elder abuse, determine its associated risk factors, and assess elders' quality of life.

SUBJECTS AND METHODS

Study Design and Setting: An analytical cross-sectional study was conducted at 22 geriatric homes and 8 social insurance offices randomly selected from North, South, East, and West Zones of Cairo governorate over a period of 7 months from April 1 to October 31, 2022. The study protocol was approved by ethical committees of Faculty of Medicine (Girls), Al-Azhar University and Ministry of Social Solidarity. Oral informed consent from the studied elders was obtained.

I. At Institutional Setting:
A complete list of all officially registered geriatric homes in North, South, East and West Zones of Cairo governorate was obtained by social solidarity directorate; then a cluster random sample was taken from each zone proportionally allocated to the number of its included districts. One district (Al-Wayly) was randomly chosen from West Zone; two districts (Shobra and Al- Sahel) were randomly taken from North Zone; two districts (Heliopolis and Al- Nozha) were randomly selected from East Zone and three districts (Helwan, Al- Sayeda Zainab and Al-Muqatam) were randomly allocated from South Zone. A complete list of all residents of all geriatric homes in the randomly selected districts was obtained (totally 439 elders). A total sample of 250 of them was randomly chosen proportionally allocated to their sex (83 males and 167 females).

II. At non- Institutional Setting
A systematic random sample of 250 non-institutionalized elders was chosen from 8 randomly selected social insurance offices which were located adjacent to the randomly selected districts in North, South, East and West Zones of Cairo governorate. The same proportional allocation that was used in choosing institutionalized elders was also applied in non-institutional settings.

Inclusion criteria
All Egyptian elders who were 60 years old and above and residing geriatric homes in the randomly selected districts or attending the randomly selected social insurance offices were eligible for this study.
Exclusion criteria
Those who didn't fulfill the above eligible criteria or refused to participate in the study were excluded.

Sample Size: The required sample size was calculated depending on the prevalence of elder abuse in Egypt (65.0% in geriatric home setting [9] and 52.0% in community setting [10]), 95% confidence level and 80% power using the following formula [15]**:**

$$\text{Sample size} = \frac{(Z1\text{-}\alpha/2 + Z1\text{-}\beta)^2[P1\ (1 - P1) + P2(1 - P2)]}{(P1 - P2)^2}$$

Where;

Zα/2 is 1.96 for alpha 0.05, Z1-β is 0.84 for power 80%, P1 is the prevalence of elder abuse in geriatric homes setting, and P2 is the prevalence of elder abuse in community setting.

Accordingly, a minimum sample size of 222 for each setting was determined. Nevertheless, 250 institutionalized and 250 non-institutionalized elders were studied.

Study tools: interviewer-administered valid and reliable questionnaires were used.

1. **A specially designed questionnaire** was established to elicit data about elders' demographics, socio-economic characteristics and medical history.

2. Assessment tool for domestic elder abuse (ATDEA)[16]: The studied elders were asked about their exposure to any types of elder abuse during the last 12 months using ATDEA which includes 36 items based on seven subtypes of elder abuse (i.e. physical, sexual, psychological, neglect, self-neglect, economic and social abuse).

3. Expanded indicators of abuse (E-IOA) instrument [17]: It was used to identify elders who are at risk of abuse. It includes 11 indicators (behavior problems, emotional and cognitive difficulties, emotional dependence, family/ marital problems, poor interpersonal relationships, financial dependence, unrealistic expectations, lack of understanding of own medical conditions, social isolation, lack of social support and blaming behavior). Each sub-indicator of these11 indicators has a four-point scale (1 = not at all, 2 = very seldom, 3 = often, 4 = very often or very much). The higher the mean score of E-IOA the greater the risk of elder abuse.

4. Arabic version of world health organization quality of life (WHO QOL)-BREF questionnaire [18]: It is a short version of the WHOQOL-100 scale which produces a quality of life profile through its 26 items, 24 are distributed among four domains: physical health (seven items), psychological health (six items),

social relations (three items), and environment (eight items) and two about the overall Quality of Life (QOL) and general health items. Each item has five options range from one to five. The higher score indicates a better quality of life.

Statistical analysis

Statistical Package for Social Sciences (SPSS) version 16 was used for data entry and analysis. For a descriptive purpose, qualitative data were presented as frequencies and percentages. For quantitative data; means, standard deviations and ranges were used to describe parametric data, while medians and interquartile ranges (IQR) (25% –75%) were used for non-parametric ones. Pearson's Chi-square Test for independence (χ^2) was used to assess significance in the observed differences between proportions of qualitative data. Fisher Exact Test was done instead of Chi-square Test when any of the expected frequency was less than five. Significance in the differences between means of two continuous quantitative variables of unpaired groups was assessed using Independent Student's t-Test for parametric data and Mann-Whitney U for non-parametric ones.

Post-significance tests including Hedges' g test and Glass rank-bi-serial correlation coefficient (rg) test were used to measure the effect size and the strength of the association of the observed differences after doing the significance tests. Hedges' g Test is an alternative measure for Cohen's d Test where there are different sample sizes, with interpretations of small (0.20), medium (d = 0.40), and large (d = 0.80). Glass rank-bi-serial correlation coefficient (rg) is the appropriate method of obtaining the effect size for the Mann-Whitney U test. Its value ranges from -1.00 to 1.00, with interpretations of small (< 0.30), medium (0.30 - 0.50), and large (> 0.50).

The prevalence of elder abuse in Cairo governorate was estimated using the following equation of critical value of confidence interval 95.0% = [proportion of elder abuse ± (1.96*standard error)]. Calculating the standard error by [$\sqrt{p(100-p)/n}$; where p is the observed proportion of abusive elders (69.4%) in this studied sample which was representative of elderly population (institutional and non-institutional) in Cairo and" n" is sample size (500). Standard error = $\sqrt{69.4*(100-69.4)/500}$ = 2.061.

The calculated C.I. (95.0%)= proportion of elder abuse ± (1.96*standard error) = 69.4± (1.96*2.06) = 69.4 ± 4.038. (65.36% - 73.44%). Accordingly, the estimated prevalence of elder abuse in Cairo was 65.36% to 73.44%. C.I. = 69.4± (1.96*2.06) = 69.4 ± 4.038= (65.36% to 73.44%).

Spearman rank correlation coefficient was used to assess relation between total scores of. expanded indicators of abuse instrument and quality of life BREF scale. Binary logistic regression was used to determine the predicators of different types of elder abuse. P-values were taken at a pre-determined threshold probability, the significance level of 0.05 and 95% confidence limit. The results were deemed to be statistically significant if the p-value (two-tailed) was less than 0.05.

RESULTS

The median age of institutionalized elders (72 years) was significantly higher than that for non-institutionalized elders (64 years) ($p<0.05$). Females accounted for 66.8% of institutionalized elders ($p<0.05$). Institutionalized elders who were single or divorced / separated were significantly higher (25.6% and 8.4%, respectively) than non-institutionalized elders (2.8% and 2.4%, respectively), while married elders were significantly higher among non-institutionalized (44.8%) compared to institutionalized (8.8%) ($p < 0.05$). It also found that 44.8% of institutionalized elders didn't have offspring comparing to 6.8% of non-institutionalized elders ($p < 0.05$). Current occupation and family income were significantly different between institutionalized and non-institutionalized elders ($p <0.05$) (table 1).

Based on the observed proportion of abusive elders (69.4%) in this studied sample which was representative of elderly population (institutional and non-institutional) in Cairo and using critical value of confidence interval 95.0% (1.96); the estimated prevalence of elder abuse in Cairo governorate was 65.36% to 73.44%.

Psychological abuse was the most predominant type of elder abuse (58.6%), followed by self-negligence (34.2%), then negligence (33.4%), economic (18.8%), physical (16.0%), and social abuse (15.6%). The least common type was sexual abuse (1.0%) (figure 1).

There were no statistically significant differences between abusive and non-abusive elders as regard their age and sex ($p>0.05$). It was found that proportion of being single was significantly higher for abusive elders (16.4%) than non-abusive elders (9.2%) ($p<0.05$). It also found that 29.4% of abusive elders didn't have offspring comparing to 17.6% of non-abusive elders ($p < 0.05$). As regards level of education, it was noticed that 33.1% of abusive elders were illiterates compared to 17.6% of non-abusive elders ($p <0.05$). Concerning current occupation, it was found that 8.6% of abusive elders compared to 18.3% of non- abusive elders were currently working ($p<0.05$). Working abusive elders were more present among craft or trade workers, as well as service or sales workers (30.1% and 43.3%, respectively). On the other hand, higher percentages of working non-abusive elders were managers or professionals and technicians or clericals (32.1% for each category) ($p<0.05$). Significant differences were observed between abusive and non-abusive elders as regard family income and its source ($p <0.05$). It was also found that a higher percentage of abusive elders (55.3%) were staying in geriatric homes compared to non-abusive elders (37.9%) ($p < 0.05$) (table 2). Median of all indicators of abuse instrument were

significantly higher among abusive elders than non-abusive elders ($p<0.05$).

The effect size of these differences was large for social isolation, family/ marital problems, and emotional difficulties indicators (Hedges' g test= 0.99, 1.38, and 1.04, respectively), medium for behavioral problems, blaming behavior, poor interpersonal relationships, lack of social support and financial dependence indicators (Hedges' gtest= 0.68, 0.41, 0.74, 0.70 and 0.73, respectively), and small for emotional dependence, cognitive difficulties and unrealistic expectation indicators (Hedges' g test = 0.19, 0.26 and 0.21, respectively). Collectively, the median of total score of expanded indicators of abuse instrument were significantly higher among abusive elders than non-abusive elders ($p<0.05$). Glass rank-bi-serial correlation coefficient test (rg) (0.57) further confirmed large effect size of this difference (table 3).

The most important predictor of elder abuse was being currently not working men or housewives (OR = 6.52), then expression of guilt or anger towards family (OR = 4.75), living alone (OR = 4.73) and history of stroke (OR = 4.72), followed by living with family (OR = 3.96), depression (OR = 2.55), and total score of expanded indicators of abuse instrument (OR=1.09) (table 4).

Table (1): Socio-demographic characteristics of the studied elders

Demographic characteristics	Institutionalized elders n = 250 no. (%)	Non-institutionalized elders n = 250 no. (%)	Stat. test	p-value
Age (Years)				
Age Groups				
60 - < 70	95(38.0%)	172(68.8%)	χ^2=57.53	< 0.001*
70 -< 80	101(40.4%)	67(26.8%)		
80+ years	54(21.6%)	11(4.4%)		
Median (IQR) [25%-75%]	72 (64-78)	64 (62-70)	U=18251	< 0.001*
Sex				
- Male	83 (33.2%)	108 (43.2%)	χ^2 =5.29	0.020*
- Female	167 (66.8%)	142(56.8%)		
Marital Status				
- Single	64 (25.6%)	7 (2.8%)	χ^2=1.15	< 0.001*
- Married	22 (8.8%)	112 (44.8%)		
- Widow	143 (57.2%)	125 (50.0%)		
- Divorced/ separated	21 (8.4%)	6(2.4%)		
Having off-spring				
- None	112 (44.8%)	17 (6.8%)	χ^2 =117	< 0.001*
- 1-3	116 (46.4%)	138 (55.2%)		
- More than 3	22 (8.8%)	95 (38.0%)		
Education				
- Illiterate	57 (22.8%)	85 (34.0%)	χ^2 =9.47	< 0.001*
- Read and write	9 (3.6%)	8 (3.2%)		
- Primary / preparatory	38 (15.2%)	36 (14.4%)		
- Secondary University /post graduate	65 (26.0%)	63 (25.2%)		
	81 (32.4%)	58 (23.2%)		
Current occupation (Working)	16 (6.4%)	42 ((16.8%)	χ^2 =13.18	< 0.001*
Types			χ^2=27.74	< 0.001*
- Managers/professionals	2 (12.5%)	11 (26.2%)		
- Technicians /clericals	11 (68.8%)	2 (4.8%)		
- Craft and trade workers'/ machine operators	2 (12.5%)	12 (28.6%)		
- Services and sales	1 (6.2%)	17 (40.4%)		
Family income				
- Not enough	39 (15.6%)	90 (36.0%)	χ^2 =38.29	< 0.001*
- Enough	167 (66.8%)	147 (58.8%)		
- More than enough	44 (17.6%)	13 (6.2%)		

SD: Standard deviation, χ^2: Chi-square test, U: Mann-Whitney U test, t: Independent t-test (t). *: Significant p-value ($p<0.05$).

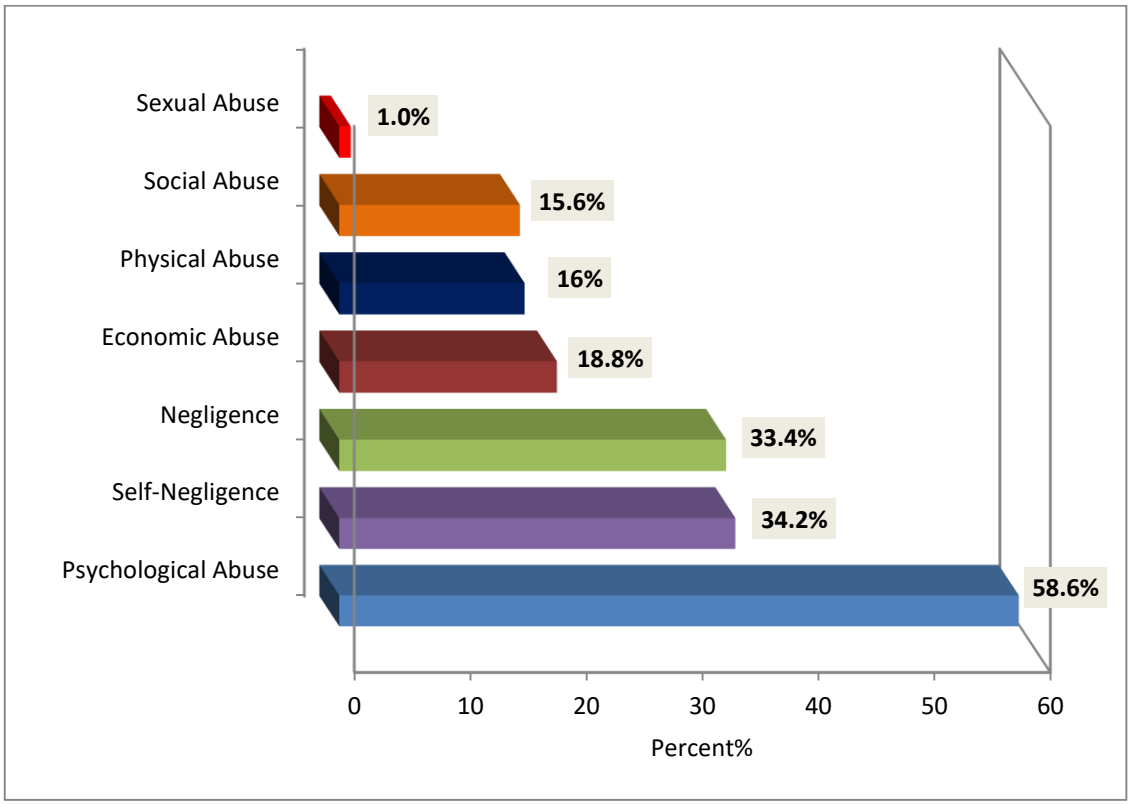

Figure (1): Self-reported types of elder abuse in the studied sample

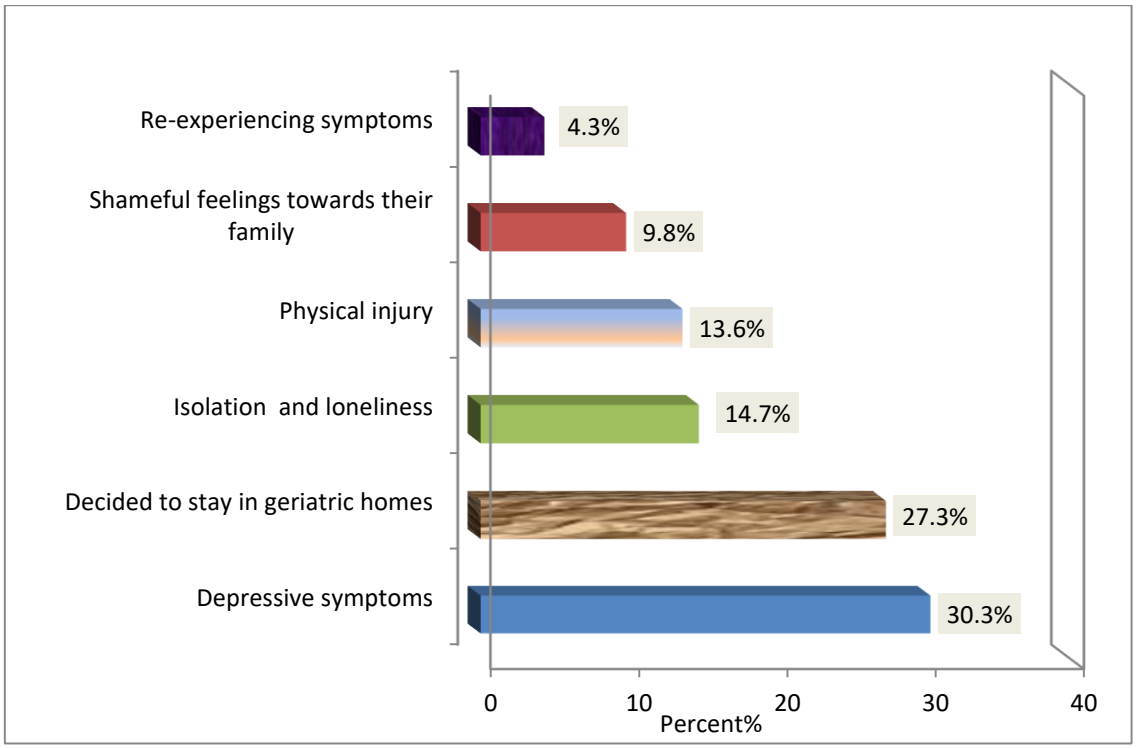

Figure (2): Consequences of abuse among the studied abusive elders

Depressive symptoms were the most common consequence of elder abuse (30.3%), then the decision to stay in geriatric homes (27.3%), followed by isolation and loneliness (14.7%), physical injury (13.6%), and shameful feelings towards their families (9.8%), while re-experiencing symptoms was the least common consequence (4.3%) (figure 2).

The mean of all domains scores (physical, psychological, social relationship and environmental) of quality of life were significantly lower for abusive elders than non-abusive elders ($p<0.05$). Hedges' g test also confirmed large effect size of the differences between abusive and non-abusive elders regarding psychological and environmental domains (1.10 and 0.84 respectively). The effect size of physical and

social domains was found to be medium (Hedges' g test = 0.61 and 0.60, respectively). Mean total score of quality-of-life BREF scale was significantly lower for Total score of expanded indicators of abuse instrument was significantly and strongly negatively correlated with total score of quality-of-life BREF scale (r = -0.665, p<0.05) (figure 3).

abusive elders than non-abusive elders (p <0.05), with a large effect size (Hedges' g test =1.00) (table 5).

Table (2): Relationship between elder abuse and socio-demographic characteristics of the studied elders

Socio-demographic characteristics	Abusive elders n = 347 (69.4%) no. (%)	Non-abusive elders n= 153 (30.6%) no. (%)	Stat. test	p-value
Age (Years)				
Age Groups				
- 60 - < 70	182 (52.4%)	85 (55.6%)	χ2 =0.51	0.772
- 70 -< 80	120 (34.6%)	48 (31.4%)		
- 80+ years	45 (13.0%)	20 (13.1%)		
Mean ± SD	69.5 ±7.4	68.9±7.4	t = 0.81	0.417
Range	31 (60-91)	30 (60-90)		
Sex				
- Male	124 (35.7%)	67 (43.8%)	χ2 =2.91	0.088
- Female	223 (64.3%)	86 (56.2%)		
Marital Status				
- Single	57 (16.4%)	14 (9.2%)	χ2=15.51	<0 .001*
- Married	76 (21.9%)	58 (37.9%)		
- Widow	194 (55.9%)	74 (48.3%)		
- Divorced/ separated	20 (5.8%)	7 (4.6%)		
Didn't have offspring	102 (29.4%)	27 (17.6%)	χ2 =7.65	0 .006*
Education				
- Illiterate	115 (33.1%)	27 (17.6%)	χ2 =18.35	<0.001*
- Read and write/ literate certificate	14 (4.0%)	3 (2.0%)		
- Primary / preparatory schooling	53 (15.4%)	21 (13.7%)		
- Secondary schooling	82 (23.6%)	46 (30.1%)		
- University /post graduate	83 (23.9%)	56 (36.6%)		
Current occupation (working)	30 (8.6%)	28 (18.3%)	χ2 =9.65	0 .002*
Type:				
- Managers/ professionals	4 (13.3%)	9 (32.1%)	χ2 =8.48	0 .037*
- Technicians /clericals	4 (13.3%)	9 (32.1%)		
- Craft and trade worker's/ machine operators	9 (30.1%)	5 (17.9%)		
- Services and sale workers	13 (43.3%)	5 (17.9%)		
Family income				
- Not enough	108 (31.1%)	21 (13.7%)	χ2 =17.07	<0.001*
- Enough	204 (58%)	110 (71.9%)		
- More than enough	35 (10.1%)	22 (14.4%)		
Source of income				
- Pension	290 (83.6%)	119 (77.8%)	χ2 =11.36	0 .003*
- Pension and or monthly subsidy	27 (7.8%)	6 (3.9%)		
- Pension and salary from current work	30 (8.6%)	28 (18.3%)		
Staying in geriatric home	192 (55.3%)	58 (37.9%)	χ2 = 12.89	<0.001*

SD: Standard deviation, χ^2: Chi-square test, t: Independent t-test. *: Significant p-value (p<0.05).

Table (3): Mean scores of expanded indicators of abuse instrument among abusive and non-abusive elders

Mean scores of indicators	Abusive elders n = 347 Mean±SD	Non-abusive elders n= 153 Mean±SD	Stat. test	Calculated effect size
Behavioural problems	1.96±0.60	1.60 ±0.30	t=8.85 p<0.001*	Hedges' g =0.68
Blaming behavior	1.64 ±1.00	1.26±0.69	t=4.96 p<0.001*	Hedges' g =0.41
Poor interpersonal relationships	1.53±0.67	1.10±0.29	t= 9.89 p<0.001*	Hedges' g =0.74
Lack of social support	1.58±0.58	1.21±0.38	t=8.44 p<0.001*	Hedges' g =0.70
Social isolation	2.29±0.80	1.53±0.68	t = 10.21 p<0.001*	Hedges' g =0.99
Family/ marital problems	2.31 ±0.95	1.19±0.32	t = 19.59 p<0.001*	Hedges' g =1.38
Emotional difficulties	1.60±0.45	1.19±0.21	t = 13.46 p<0.001*	Hedges' g =1.04
Emotional dependence	2.11±0.52	2.02±0.32	t = 2.18 p=0.029*	Hedges' g =0.19
Cognitive difficulties	1.06±0.27	1.00±0.06	t= 3.71 p<0.001*	Hedges' g =0.26
Unrealistic expectation	1.06±0.33	1.00±0.10	t = 3.34 p=0.001*	Hedges' g =0.21
Financial dependence	1.79±0.76	1.28±0.50	t= 8.77 p<0.001*	Hedges' g =0.73
Total score: Median (IQR) [25%-75%]	77 (66-89)	58 (53-65)	U=7551 p=0.000*	rg =0.57

SD: Standard deviation, χ^2: Chi-square test, U: Mann-Whitney U test, POR: Prevalence odds ratio (), C.I: Confidence interval, t: Independent t-test, Glass rank-bi-serial correlation coefficient test (rg), *: Significant p-value (p<0.05).

Table (4): Binary logistic regression for predictors of elder abuse

Predictors of overall elder abuse	Adjusted odds (OR)	p-value	95% C.I. for odds	
			Lower	Lower
Present occupation (Ref = Manager/professional / technician /clerical)		**0.055**		
- Craft and trade workers/pant and -machine operators/services and sale workers	2.94	0.238	0.48	17.74
- Not working men/ housewives	6.52	0.017*	1.40	30.34
Expresses guilt or anger, and bitterness towards the family (Ref= never)	**4.75**	**0.013***	**1.39**	**16.20**
Living arrangement (Ref= Living with spouse)		**0.001***		
- Living alone	4.73	0.027*	1.19	18.79
- Living with offspring	0.902	0.894	0.198	4.105
- Living with family	3.96	0.024*	1.19	13.14
History of stroke (Ref= No)	**4.72**	**0.009***	**1.46**	**15.19**
Depression (ref= never)	2.55	0.041*	1.04	6.29
Total score of expanded indicators of abuse instrument	**1.09**	**0.045***	**1.002**	**1.205**

*: Significant p-value (p<0.05).

Table (5): Scores of quality of life BREF scale among abusive and non-abusive elders

Scores	Abusive elders n = 347 Mean±SD	Non-abusive elders n = 153 Mean±SD	Stat. test	Calculated effect size
Physical domain	19.9±6	23.5±6	t = 6.18 p<0.001*	Hedges' g = 0.61
Psychological domain	17.7±4	22.1±3.9	t = 11.36 p<0.001*	Hedges' g = 1.10
Social relationship domain	9.6±1.8	10.6±1.2	t = 7.07 p<0.001*	Hedges' g = 0.60
Environmental domain	24±4.6	27.8±4.2	t = 8.82 p<0.001*	Hedges' g = 0.84
Total score	71.3±12.9	84.2±12.5	t= 10.35 p<0.001*	Hedges' g = 1.00

SD: Standard deviation, t: Independent t-test, *: Significant p-value (p<0.05).

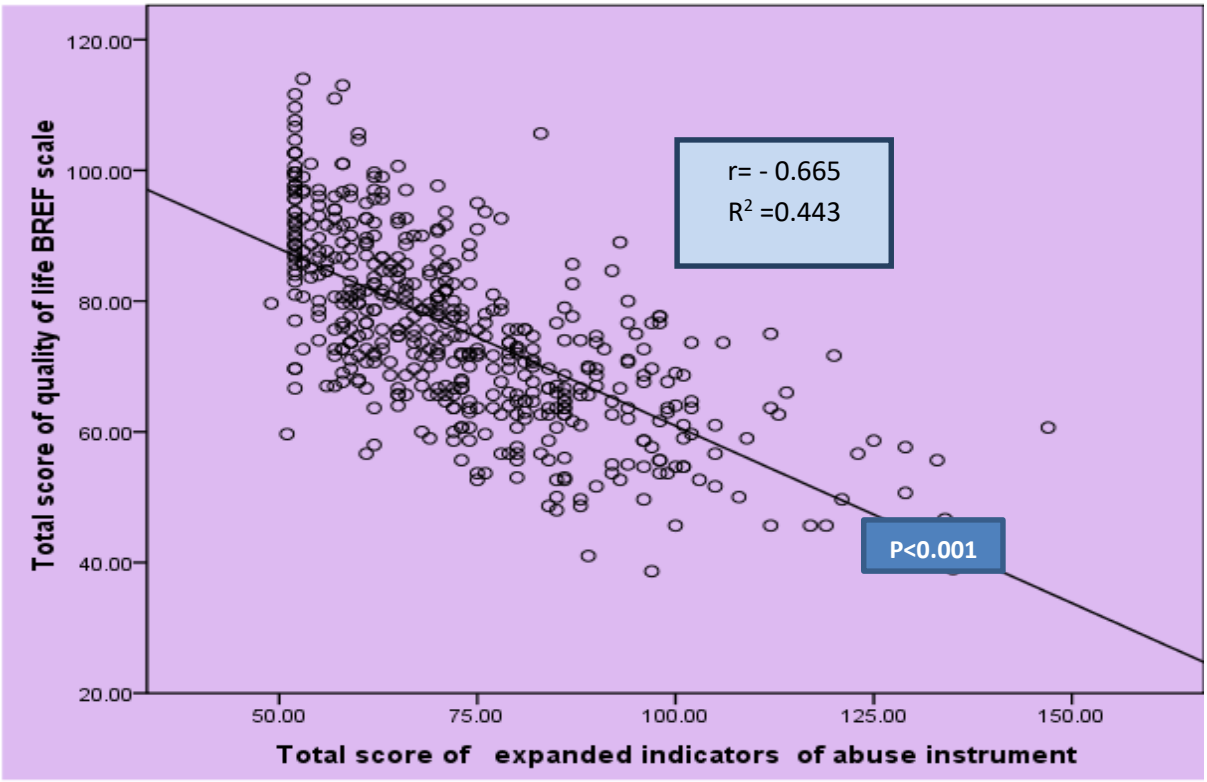

Figure (3): Scatter plot of spearman rank correlation between total scores of expanded indicators of abuse instrument and quality of life BREF scale

DISCUSSION

Elder abuse is a global public health concern that has received increasing attention in recent years due to the growing ageing population and the recognition of its harmful effects on elders' well-being [19].

Based on the observed proportion of abusive elders (69.4%) in this studied sample, which was representative of elderly population (institutional and non-institutional) in Cairo, the estimated prevalence of elder abuse in Cairo governorate, Egypt, was 65.36% to 73.44%. This finding is in agreement with Mwaheb et al [14] who reported that elder abuse has occurred among 72.6% of studied elders in Fayoum governorate, Egypt. Fouad and Mohamed [20] also reported a higher rate of elder abuse in Egypt (88.0%). On the contrary, the rate of elder abuse in other studies carried out in Egypt was varied from 23.0% to 46.0%, which was lower than the finding of the current study [21-23]. Hosseinkhani et al [24] in Iran, McDonald [25] in Canada and Ramalingam et al [26] in India reported lower rates of elder abuse (38.5%, 8.2% and 50.2%, respectively) than in the present study. However, a systematic review conducted by Dong [27] revealed that prevalence of elder abuse varied significantly, ranging from 2.2 to 79.7%, across five continents.

The varied prevalence of elder abuse across studies could be attributed to differences in the definition of elder abuse, methodology, measurement instruments, settings, cultural and religious backgrounds of the studied populations, and variation in reference periods to measure extent of abuse [6, 7, 28, 29]. In the current

study the higher prevalence of elder abuse could be explained by the fact that there is a weak Egyptian traditional support system for elders, including the incorporation of women into the workforce, a decline in the extended family, the inadequacy of social support systems, and worsening economic conditions. As a consequence, there is a shortage of available caregivers to adequately respond to the needs of the elders. Various cultural changes, such as an increase in intolerance and discrimination against elders, together with the tendency to confine elders to institutions, also contribute to the occurrence of elder abuse among Egyptian families [9, 30].

The results of the current study revealed that psychological abuse was the predominant type of elder abuse, followed by self-negligence, negligence, then economic, physical and social abuse. In agreement, a recent Egyptian study revealed that psychological abuse was the most prevalent type of elder abuse, followed by neglect, economic and physical abuse [14]. Arab-Zozani et al [31] in Iran also noticed that psychological abuse was the most common type of elder abuse, followed by neglect, economic and physical abuse. In addition, Dean [32] in Australia found that psychological abuse was the most frequently reported types of elder abuse next to economic, followed by neglect and physical, social, and sexual abuse. Contrary to the above mentioned studies, Ahmed and AbdElsalam[23]and Badr and Shaheen[9]reported that economic abuse was the most prevalent type of elder abuse in Egypt, followed by psychological abuse. However, El-Khawaga et al [22] in Egypt found that neglect was the most common type of elder abuse, followed by psychological, economic, and physical abuse. Cadmus et al [33] in Nigeria found that social abuse was the most prevalent type of elder abuse. In Iran, Honarvar et al [34] noticed that physical abuse was the most prevalent type of elder abuse, followed by social, psychological, financial, and sexual abuse, then neglect.

In the present study, the reason behind the observed higher frequency of psychological abuse and negligence among elders could be attributed to their greater comfort in disclosing these types of abuse compared to other types.

In the current study, abusive and non-abusive elders were found to have distinct socio-demographic characteristics, which could be the putative underlying risk factors.It was found that elder abuse was significantly associated with being single, didn't have offspring, illiterate, currently not working men or housewives, currently occupied as service or sale worker, insufficient income, living alone or with family, staying in geriatric homes, elders' expression of guilt or anger and bitterness towards their family, having a physical disability, a history of stroke, and depression. These findings align with previous Egyptian studies which revealed that elder abuse was significantly associated with being illiterate, unmarried, jobless, earning little money, living alone, residence in geriatric homes and having physical disability [9,14,22,23]. In accordance, other studies found that elder abuse was significantly associated with low education level, being unmarried, having an intensive job, low income level, living alone, living in geriatric home, having physical disability and poor inter-personal relationship [19, 35-38].

Noteworthy, in the present study there was no significant difference between abusive and non-abusive elders as regards their age and sex. Brijoux et al [38] and Lee et al. [39] also didn't find a significant relationship between age and sex and elder abuse. In the contrary, other studies showed that as the age increased, the likelihood of elder abuse also increased [22, 23, 40] and women were more likely than men to experience elder abuse [10, 14, 22, 23, 40].

In the present study, depressive symptoms were the most common consequence of elder abuse, followed by choosing to reside in geriatric homes, isolation, loneliness, and physical injury, then shameful feelings towards family, and re-experiencing symptoms. In agreement, an earlier study in Egypt revealed that depressive symptoms, re-experiencing events, shame, isolation, loneliness, and physical injury were the consequences of elder abuse [41]. Other studies also highlighted that abusive elders frequently experience depressive symptoms and post-traumatic stress disorder as consequences of elder abuse [37, 42, 43].

In the current study, a negative influence of abuse on the overall quality of life of the studied elders was evident. In other studies, elder abuse was significantly related to a poor quality of life [8, 38, 44]. However, Fouad and Mohamed [20] and Wang et al [45] didn't find any relationship between elder abuse and quality of life. The association of elder abuse with depression, loneliness, a reduction in autonomy, and reduced life satisfaction all undermines elders' overall quality of life [38].

Along with the effect of abuse on the overall elders' quality of life, it also has repercussions on its different domains. The current study revealed that elder abuse had a strong negative effect on the psychological and social relationship domains of quality of life. In agreement, other researchers concluded that elder abuse adversely affects the elders' psychological well-being and social aspects of their quality of life [37, 38, 45-47].

In the present study, a worthy note was the strong negative effect of elder abuse on environmental domain of quality of life which was probably because abusive elders expressed a lack of necessary requirements for their daily lives, limited opportunities for leisure activities and having insufficient financial resources to meet their needs.

Of interest, the present study also demonstrated a moderate negative effect of elder abuse on physical domain of quality of life. Some studies also concluded that elder abuse has negative effects on physical

wellbeing including physical injury, persistent physical pain, declining functional abilities, missed productivity and sleep disturbances [8, 48, 49].

CONCLUSION

Based on the previous discussion, the present study provides reasonable evidence that elder abuse is a relevant public health problem occurring in both institutional and non-institutional settings. A higher prevalence of all types of elder abuse among institutionalized elders than non-institutionalized elders was noticed, except for self- negligence. Psychological abuse was the predominant type of elder abuse. Depressive symptoms were the most common consequence of elder abuse.

Abusive and non-abusive elders were found to have distinct socio-demographic characteristics. Elders who were single, didn't have offspring, lived alone, institutionalized, illiterate, were elementary worker's pre-retirement, and had insufficient income were more likely to be abused.

Being currently not working men or housewives, expression of guilt or anger and bitterness towards the family, living alone or with family, having history of stroke, depression, and the total score of the expanded indicators of abuse instrument were independent predictors of overall elder abuse. Elder abuse has detrimental effects on elders' quality of life. A collaborative multidisciplinary approach is needed to prevent elder abuse and intervene with it.

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الملخص العربي

إساءة معاملة المسنين: الأنواع وعوامل الخطروتأثيرها على جودة الحياة بين السكان المسنين في المؤسسات وخارج المؤسسات في القاهرة، مصر

داليا سالم عبده[1]، سميه محمد أبوالفتوح لاشين[1]، اشواق صفي الدين محمد[1]

[1] قسم طب المجتمع وطب الصناعات ،كلية طب بنات، جامعة الأزهر، جمهورية مصر العربية.

ملخص البحث

الخلفية:تعتبر اساءة معاملة المسنين هي المعاملة السلبية تجاهالأفراد الذين بلغت أعمارهم 60 عامًا فما فوق ، وتشمل الإساءة الجسدية والجنسية والنفسية والاقتصادية والاجتماعية والإهمال.كما تعد اساءة معاملة المسنين ظاهرة معقدة حيث تسهم عوامل مختلفه في حدوثها. يمكن أن يكون لاساءة معاملة المسنين عواقب وخيمه مثل الاكتئاب والعزلة والإحباط والإيواء في دور المسنين. كما أن لهاآثارًا ضارة على جودة حياة المسنين.

الهدف: الاهدف الرئيسيه من هذه الدراسة هي التعرف على الأنواع المختلفة من إساءة معاملة المسنين و تحديد عوامل الخطر المرتبطة بها وتقييم جودة الحياة لدى العينة المدروسة.

الطرق :أجريت دراسة مقطعية تحليلية في 22 دارًا للمسنين و8 مكاتب للتأمينات الاجتماعية من شمال وجنوب وشرق وغرب القاهرة على عينة إجمالية مكونة من 500 مسن.تم أخذ عينة عنقودية عشوائية من دور المسنين من كل اداره تم اختيارها عشوائيا. أما عن كبار السن غير المؤسسيين فقد تم اختيارهم بطريقة عشوائية منهجية من مكاتب التأمينات الاجتماعيه المجاورة للادرات التي تم اختيارها عشوائيا. تم جمع البيانات باستخدام استبيانات صالحه وموثوقه عن طريق المقابله الشخصيه.

النتائج:حدثت إساءة معاملة المسنين بين 69.4٪ من العينة المدروسة خلال الـ 12 شهرًا السابقة. وكان النوع السائد من إساءة معاملة المسنين هو الإساءة النفسية، يليها اهمال الذات ثم الإهمال من مقدمي الرعايه لهم،فالاساءه الاقتصاديه و الجسديهوالاجتماعيه والجنسيه. كما كشفت الدراسه ان المسنين العازبين والذين يقيمون في دور المسنين والأميين والذين ليس لديهم دخل كافٍ كانوا أكثر عرضة للإساءة. وكانت من اهم عوامل الخطر للتعرض للاساءه هي كون المسنين لايعملون او ربات منزل, تعبيرات الذنب أو الغضب والمرارة تجاه العائلةوالعيش بمفردهم. وقد أثبت الدراسه ان تعرض المسنين لسوء المعامله كان له تاثيرا سلبيا علي جودة حياتهم الشامله.

الإستنتاجات:إساءة معاملة المسنين هي مشكلة صحية عامة ذات أهمية بالغة. ومن الضروري إنشاء وتنفيذ تدابير وقائية وإدارية ناجحة للحد من هذه المشكلة على مستوى الأسرة والمجتمع والسياقات المؤسسية .

الكلمات المفتاحيه:إساءة معاملة المسنين، المسنين المؤسسيين وغير المؤسسيين،، جودة الحياة، عوامل الخطر، الأنواع.

الباحث الرئيسي:

الاسم:داليا سالم عبده ،قسم طب المجتمع وطب الصناعات، كلية طب بنات القاهرة، جامعة الأزهر، جمهوريه مصر العربية.

الهاتف:01223107953

البريد الإلكتروني:daliasalem.medg@azhar.edu.eg, dalia8810@yahoo.com