Relationship between Abuse Experience and Quality of Life of Community Dwelling Older Adults

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Abstract

Elder abuse may increase the vulnerability of older adults to diseases and decrease their general health status, Addressing this issue is important for promoting quality of life of older adults. Aim: the aim of the study was to identify the relationship between abuse experience and quality of life of community dwelling older adults. Setting: The study was carried out in the outpatient clinics in the Shark EL- Madina hospital in Alexandria, Egypt (medical, hepatology, and cardiology). Subjects: The study included, one hundred older adults aged 60 years and above, able to communicate effectively, and accept to participate in the study Tools: three tools were used in this study; the socio-demographic and clinical data structured interview schedule, LEIPAD Quality of Life Questionnaire, and the Hwalek-Sengstock Elder Abuse Screening Test (H-S/EAST). Results: the majority of the study subjects who reported abuse experience were females, widows, housewives and illiterate. Poor quality of life was noted among females, widows, and illiterate. The majority of the abused older adults had one or more medical problems, and use of an assistive device. There is no a statistically significant difference between elders' abuse experience and their quality of life. Conclusion: A positive relationship was found between the abuse experience of the studied older adults and their quality of life, however no a statistical significant relation. Recommendations: In-service training programs should be planned by the gerontological nurse and offered to the caregivers of older adults, health care professionals, and social service workers both in the community and in institutional settings, focused on the detection and prevention of elder abuse. Raising awareness of the general public and the responsible authorities via mass media about the importance of this problem.

Key words: quality of life, elder abuse, nurses' role.

Introduction

The aging population is increasing worldwide, but the abuse and mistreatment in the elderly (often silenced forms) has also been increasing, with strong implications for their quality of life (Martins et al, 2014). Elders' abuse is a serious human right violation that requires urgent action. It is also a major public health problem that results in serious health consequences for the victims,

including increased risk of morbidity, mortality, institutionalization, and hospital admission, and has a negative effect on families and society at large. Despite the severity of its consequences, major gaps remain in estimating the prevalence of elder abuse (Yon et al. 2017).

The exact prevalence and incidence of elder mistreatment or abuse is unknown (**Stone et al 1999**). Elder abuse is neither a rare nor an isolated phenomenon all over the world. Rather, all indicators suggest that

maltreatment of vulnerable older adults is widespread and occurs among all subgroups. It is difficult to be confident about the accuracy of any estimation because of significant underreporting and differing definitions of elder abuse and neglect (Miller. 2012). According to WHO definition, elder abuse can be 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". WHO has estimated the prevalence of elder abuse between 4 to 6%. On the other hand, some studies proved under determined abuse cases so that only one in 10 cases is reported (WHO, 2015).

The National Center on Elder Abuse (2009 b) recognizes three basic categories of elder abuse (i.e. domestic elder abuse, institutional elder abuse, and self-neglect or self-abuse) and seven major types or forms (i.e., physical abuse, sexual abuse, emotional psychological abuse. neglect. abandonment, financial material or exploitation, and self-neglect). Self-neglect in this classification includes behaviors of older adults that threaten their health or safety (Miller, 2012).

The physical abuse is defined as the practice of injury or physical coercion and elder physical the injury psychological damage. Psychological abuse is the practice of mental anguish and suffering. It is inflicted, for example, through verbal abuse, insults, threats, various processes of infantilization and humiliation. The psychologically battered elderly feels fear, apathy and has difficulty making decisions. The material abuse lies in the economic or improper exploitation of the elderly and illegal use of their funds and resources. It's achieved, for example, through the financial exploitation of the elderly. Neglect is also a form of abuse, such as lack of hygiene care, the lack of attention paid to feeding schedules and / or medication (Martins et al, 2014; Yon et al, 2017)

Elder abuse may occur from family, society/ culture or the personality of the caregivers. The conductive situations of abuse may be related to stressful situations with abuse of drugs, conflict, psychological disorders and/ or experiences of the assailant. It can further expand the possibility of mistreatment of the elderly, factors such as: new family formation. cohabitation. disability both physical and mental, low cognitive and functional ability, economic power of the population, the stress and problems of the caregiver in a situation of dependency, personal problems and the prior existence of patterns of violence (Habjanic & Lahe, 2012).

Studies have shown that the main perpetrator is a family member of the elderly making it difficult to identify, since they are afraid to report it, not only for themselves but also to protect family and friends, fearing that things may become even more unfavorable. In most cases the perpetrators were reported to be spouses and spouses and sons; especially notable are the percentages where the participants lived at home. Daughters were reported primarily in connection with mental abuse, grandchildren equally in connection with mental and financial abuse. A daughter-in-law was described as the perpetrator more frequently than a son-in-law (Martins et al, 2014; Habjanic & Lahe, 2012).

Whether the abuse is practiced in family or institutional context, the effect are similar. The elderly tend to develop attitudes of guilt, low self-esteem, and social isolation, more easily depressed, suffer from sleep disorders, reinforce their dependencies and increases social stigma. Also, experience has negative effects on older adults' general health especially care neglect and physical abuse (Rezaeipandari et al, 2016; Sten et al, 2014). One study done in Tanta, Egypt indicated a high prevalence of abuse and dissatisfaction with life among elderly especially social abuse (Gemeay & El Kayal, 2011). It was found that elderly

exposed to psychological and physical abuse and injuries experienced low quality of life than non-exposed (**Soares et al, 2010**).

Understanding the magnitude of elder abuse is a crucial first step in the gerontological nurse role to prevent this type of violence against elderly and promote their quality of life (Yon et al, 2017). Gerontological nurses have a key role in detecting and managing elder mistreatment. Thus, it is important for nurses to incorporate assessment strategies for elder abuse and neglect and to teach the requisite health promotion actions that can inform elders, their families, and communities about preventing elder mistreatment. Gerontological nurses in community settings have many opportunities for teaching caregivers about adequate care through role modeling and verbal and written instruction. Nurses also can educate and support caregivers especially the family about basic care needs, such as nutrition, exercise and elimination in order to improve elders' quality of life. When elder abuse is routed in caregiver stress, nurses can suggest services and help find ways of providing care so that the caregiver can use these resources for selfcare. Examples of services aimed at reducing caregiver stress or dealing with caregiver problem, individual counseling to learn coping skills, Alzheimer's Association for support and education groups and in-home or day care for respite (Stone et al 1999; Miller, 2012).

Aim of the study:

The aim of this study was to identify the relationship between abuse experience and quality of life of community dwelling older adults

Research Question:

- What is the relationship between abuse experience and quality of life of community dwelling older adults?

MATERIALS AND METHOD

Materials

Design:

The study followed a descriptive correlational research design

Setting:

The study was carried out in the outpatient clinics in the Shark EL- Madina hospital in Alexandria, Egypt (outpatient medical clinic, outpatient hepatology clinic, and outpatient cardiology clinic).

Subjects:

Convenience sample of 100 older adults of those attending the previous setting and fulfilling the following criteria, aged 60 years and above, able to communicate effectively, accept to participate in the study, were included in the study.

Tools

Tool (I): Older adult's socio – demographic and clinical data structured interview schedule:

It was developed by the researchers based on relevant literature to collect information from the study subjects about socio-demographic data, medical problems, medications used, and the use of assistive devices.

Tool (II): LEIPAD Quality of Life Questionnaire:

The LEIPAD questionnaire developed by De Leo et al., 1998. It was used as a comprehensive evaluative instrument suitable for the assessment of quality of life in older people. It comprises 49 items in two core and moderator parts, 31 items thereof were classified in 7 scales that form the instrument core to measure seven domains: cognitive functioning, depression/anxiety, life satisfaction, physical function, self-care, social functioning, and sexual functioning. Each item uses a four-point Likert scale from 0 (equal to best conditions) to 3 (equal to worst conditions). Factor analysis of the core items gave two factors: psychosocial function

(life satisfaction. depression/anxiety, cognitive functioning) and physical function (self-care, physical function). The additional 18 items serve as moderators for assessing the influence of social desirability factors and personality characteristics on the seven domain scores. These 18 items cover five domains and are taken from available instruments, namely Perceived Personality Disorder Scale. Anger Scale. Desirability Scale, Self-esteem Scale, and the Trust in God Scale. Scoring system as follow: % score = (average score -1) $\frac{3 \times 100}{}$. Good = <50%Fair = 50% - <75% Poor = ≥75%

Items	No. of items	Score
Physical function scale	5	5 – 20
Self-care scale	6	6 – 24
Depression and anxiety scale	4	W4 – 16
Cognitive functioning scale	5	5 – 20
Social functioning scale	3	3 – 12
Life satisfaction scale	6	6 – 24
Personality	8	8 – 32
Anger	4	4 – 16
Desirability	3	3 – 12
Self-esteem	3	3 – 12
Trust god	2	2 – 8
LEIPID overall	49	49 - 196

Tool (III): The Hwalek-Sengstock Elder Abuse Screening Test (H-S/EAST)

This tool was developed by **Hwalek M and Sengstock M 1987** (**Neale et al, 1991**). It is a valid, brief and useful screening tool which is used to identify abused or neglected elders or persons at risk. It includes 15 item instrument which screens for three major domains of elder abuse: violation of personal rights or direct abuse, characteristics of vulnerability and potentially abusive situations. The scoring of H-S/EAST is as follows: response of "no" to items 1, 6, 12, and 14; a response of "someone else" to item 4; and a response of "yes" to all others are scored in the "abused" direction. Scores of 3 or higher on the HS-EAST have been shown to be indicative of abuse, neglect and exploitation risk when compared to the non-abused comparison group. The HS-EAST is recognized among EM researchers as a valid screening instrument

Scoring system as follow: % score = sum scores/ 15 x100 <3 Not abuse ≥3 Abuse

Items	No. of items	Score
Personal rights	5	0 - 5
Vulnerability	3	0-3
Situations	7	0 - 7
Abuse overall	15	0 - 15

Method

- An official letter was issued from the Faculty of Nursing, Alexandria University to the manger of Shark El Madina hospital in Alexandria, Egypt to obtain his approval for data collection.
- Permission from the head of the outpatient clinics was obtained after explaining the purpose and time of data collection.
- Tool I (LEIPAD Quality of Life Ouestionnaire), and tool II (The **Hwalek-Sengstock** Elder Abuse Screening Test) were translated into Arabic by the researchers and tested for content validity by seven experts in the related fields. These tools were tested reliability using Cronbach's coefficient Alpha, tool I (0.81), and tool II (0.88).
- A pilot study was carried out on 10 older adults selected from Gamal Abd El-Nasser Health Insurance Hospital (outpatient medical clinic) in Alexandria to test clarity, feasibility and the applicability of the tools.
- The researchers followed the designed schedule for data collection. The researchers used to start data collection at 9 Am all week days (from Saturday through Thursday).
- The researchers explained the purpose of the study for each older adult who fulfills the study criteria, and obtained informed consent for participation in the study. Data were collected by the researchers through face to face interview with the study subjects. Each interview lasted for 45-60 minutes providing giving a break for the study older adults if required. It was possible to interview from 3-4 older adults daily. Time of the interview ranged from 20 - 30 minutes all over the week. The data collection started from

the beginning of June till the end of October 2014.

Ethical considerations

An informed consent from the study subjects to participate in the study was being obtained verbally after explanation of the study purpose. Confidentiality of the collected data, privacy and anonymity of the study subjects and the right to withdraw at any time was assured. The study protocol and tools were approved by the Faculty Ethical Committee.

Statistical analysis of the data

Data were fed to the computer and analyzed using IBM SPSS software package version 20.0. Qualitative data were described using number and percent. Quantitative data were described using range (minimum and maximum), mean, and standard deviation. Significance of the obtained results was judged at the 5% level. Chi-square test was **used** For categorical variables, to compare between different groups. Fisher's Exact or Monte Carlo correction was used. Correction for chi-square when more than 20% of the cells have expected count less than 5

Results:

Table (1) shows the distribution of the study subjects according to their sociodemographic characteristics and clinical data. It was found that, the age of the studied subjects ranged from 60 up to 85 years. With a mean of 72.76 ± 9.60 years, females were more prevalent in this study; they constituted nearly two thirds 63.0% of elders. More than three quarters 79.0% were widow, and more than half 52.0% were illiterate.

As for health profile, the table reveals that the studied elders with gastrointestinal disorders were reported by more than half of them 58.7%, followed by genitourinary

disorders 35.9%, Musculoskeletal disorders 34.8%, Cardiovascular disorders 22.8%, and Metabolic disorders 19.6%. On the other hand, only 8.0% of the studied elders had no history of any disease.

Table (2) illustrates the distribution of the studied elders according to the mean score of their quality of life using LIPID scores and its subscales. It was observed that, the mean of the total LIPID score of the studied elders was 97.02 ± 22.94. The high the subscales' score the poor the quality of life. The results indicated that 45.0% of the studied elders reported poor quality of life compared to only 12.0% reported good quality of life. Of those 96.0% trusts in God, followed by 72.0% of them perceived personality disorders, and 68.0% depression and anxiety. On the other hand, the highest mean score means maximum impairment in each subscale. The subscales that obtained high scores by the studied elders were perceived personality disorders, self-care, and life satisfaction scales 18.09 ± 3.19, 13.53 ± 5.16 and 11.87 ± 4.06 respectively, while the least mean score that obtained by elders were self-esteem, anger, functioning social scale. and social desirability scales 5.18 ± 1.87 , 5.38 ± 3.24 , 5.68 ± 2.88 and 6.79 ± 1.65 respectively.

Table (3) shows the distribution of the study subjects according to the mean score of their abuse experience. It was found that 88% of the studied elders reported abuse experience. The percent mean score of total elder abuse was 37.67 ± 16.56 which mostly was potentially abusive situations 40.86 ± 20.31 , characteristics of vulnerability 35.67 ± 28.13 , and violation of personal rights or direct abuse 34.40 ± 31.92 .

Table (4) presents the relation between socio-demographic characteristics of the study subjects and their quality of life using LIPID scale. It was observed that the majority of the studied elders who reported poor quality of life aged 75 to less than 85 years 44.4%, females 71.1%, widow 91.1%,

illiterate 55.6%. statistically and Α significant relation was noted between marital status 0.019, educational level 0.011 and the studied elders' quality of life. On the other hand, good quality of life was reported by young old 60 to less than 75 years 50.0%, males 58.3%, married 75.0%, and able to read and write 50.0%. The table also shows that there were no a statistically significant difference detected between age. occupation before retirement, and adequacy of income p > 0.05.

Table (5) demonstrates the relation between socio-demographic characteristics of the study subjects and their abuse experience score. It was observed that the majority of 88.0% the studied older adults who reported abuse experience aged 60 to less than 75 years 51.1%, females 69.3%, widowed 79.5%, and illiterate 55.7%. A statistically significant relation was noted between sex 0.001. educational level 0.009 occupation before retirement 0.002 of the studied elders and their abuse experience score.

Table (6) shows the relation between health profile of study subjects and their quality of life. It was noted that 93.3% of the studied elders who reported poor quality of life complain of one or more medical problems, the same table revealed that more than two thirds 68.9% of older adults who reported poor quality of life were using an assistive device. There is no a statistically significant difference between presence of medical problems 0.438, use of assistive devices 0.222 and quality of life of the study subjects.

Table (7) clarifies the relation between health profile of the study subjects and their abuse experience score. It was observed that the majority of the abused older adults had one or more medical problems, and use of assistive device 90.9%, 62.5% respectively. There is no a statistically significant difference p > 0.05.

Figure (1) explains the relation between abused experience score of the study subjects and their quality of life using LIPID scale. It reveals that 43.2% of the abused elders reported poor quality of life, followed by 44.3% reported fair quality of life only 12.5% reported good quality of life with no a statistically significant difference (0.610).

Discussion

The demographic transition and the increasing life expectancy coupled with changing socio-cultural contexts especially the institution of family, has economic and social implications. The majority of older marginalized adults are being mainstream life (nuclear family, migration of the young to towns and cities, acceptance of small family norm), becoming dependent (as their living and health costs are to be met for an extended time) is increasingly seen as burdensome by the younger population. Moreover, the difference that occur in values and attitudes among the young due to sociocultural change, embracing of liberal values, lowered filial obligation and expectations of care of older persons from their children is contributing to the likelihood of neglect and abuse toward the older persons (Gupta, **2016**). Elder abuse may increase the vulnerability of ageing people to disease and decrease their general health status, so the issue is essential addressing for life promoting elderly quality of (Rezaeipandari et al, 2016).

Elderly people experience a variety of chronic diseases because of biological degeneration, with health problems being almost inevitable in the last period of human life. The most frequent degenerative diseases leading to reduced quality of life (QoL) are hypertension, osteoporosis, and diabetes mellitus (ABUEL, 2010; Li et al, 2006). The findings of the present study revealed that the majority of the study subjects who reported poor quality of life also reported to have one or more medical problems such as diabetes

mellitus, hypertension and osteoarthritis (table 6). This finding is in agreement with that of a study done by Fortin et al (2006) in Canada, who found that increased multimorbidity adversely affected OoLnegatively. Surprisingly in an another study done by Somrongthong et al (2016) in Thailand contradicted this finding of the present study and reported that there is no link appeared between chronic conditions and elders' quality of life.

With regard to the issue of the relation between the abuse experience and study subjects' health status, findings of the present study revealed that study subjects who reported having experience abuse are more likely to suffer more health problems(physical or mental) than those who did not (Fisher & Regan, 2006). The findings also revealed that the majority of the abused older adults had one or more medical problems and use of an assistive device (table 7). These findings are supported by a study done by Rezaeipandari et al (2016) in Iran, who asserted that elders who had experienced abuse in any way had more undesirable general health level. Another study done by Laumann et al (2008) in USA incongruent with the finding of the present study which reported that there is no a relation between health status of the elderly and their exposure to the abuse experience.

Sex, marital status, educational level, income and age group were independent variables associated with more than one domain of QoL for older adults (PaskulinL et al, 2009). The findings of the present study revealed that the majority of the study subjects who had poor OoL were middle old, females, widows and illiterate. While good QoL was observed in young old, males, married and able to read and write (table 4). One study done by Meleki et al (2016) in Iran confirmed the findings of the present study which asserted that illiterate elderly women significantly had low QoL in all domains. The present findings

inconsistence with another study done by Pappa et al (2009) in Greece which found that females, widow/ divorced with older age were associated with higher QoL. These contradictions can be justified as, the majority of the study subjects in the present study were illiterate widow females, they loss their spouse and they may did not find support and care in their later lives. Support from the partner may help in promoting higher quality of life.

As regard the relation between sociodemographic characteristics and experience of abuse among elderly, it was found that widowed women are more likely than men to be abused. Common problems of widowed women are poverty, being discouraged to remarry, lack of dwelling and refuge and domestic violence against them by family members (Meleki et al, 2016). The present study revealed that the majority of the studied older adults who had abuse experience were young old, females, widowed, and illiterate (table 5). A study done in Portugal by Martins et al (2014) confirmed the present findings and reported that female respondents are those with higher levels of abuse, also the most abused elderly are the unmarried and widows and those who had lower academic qualifications (illiterate, read & write). Another study reversed the present findings and denoted that married elders are more likely to be exposed to abuse than a divorced or widowed elders. Also, reported that that the older the person is, the higher the risk of an abusive situation (Schiamberg, & Gans, 2000).

Although authors reported that abuse negatively affects the health as well as quality of life of older adults irrespective of economic class (**Gupta**, 2016). The present study found a positive relation being abused and poor quality of life, however not to a statistically relation (figure 1). This finding could be related to the high sensitivity of the abuse issue itself. May be the individuals feel humiliated as they admit the experience of abuse. Moreover, may be and most probably

abused older adults feel afraid of reporting abuse which may deprive them of the care provided for them by the care providers being family or a formal caregivers. Lastly, an interpretation of this finding that nothing will be done regarding this issue even if reported necessitate nursing intervention which regarding this issue. A study done in Iran by Majideh et al (2013) contradicted the present finding and found that the older people who did not experience abuse from family members reported higher quality of life in comparison with the abused older people.

Conclusion and Recommendations

Based on the results of the current study, it can be concluded that abuse experience was reported by the majority of the study female elders, widows, housewives and illiterate in compared to male elders. Poor quality of life was reported by the majority of female elders, widows, illiterate and skilled workers. A positive relationship was found between the abuse experience of the studied older adults and their quality of life, however, no statistical significant relation.

The following are the main recommendations yielded by this study:

- Gerontological nurse have both an ethical and legal responsibility to advocate for victim of abuse by screening, identifying, and reporting cases of abuse. Mass media are a second powerful tool for raising awareness of the problem and its possible solutions, among the general public as well as the authorities.
- In-service training programs should be planned by the gerontological nurse and offered to caregivers of older adults, health care professionals, and social service workers both in the community and in institutional settings, focused on the detection and prevention of elder

abuse. Standardized practice guidelines and protocols for screening for abuse can assist health care professionals in identifying risk factors and signs of abuse.

- Incorporating topics related to elder abuse into nursing curriculum to the undergraduate students can bring elder abuse to the forefront and provide improved knowledge and greater resources for screening and prevention.
- 4. Assess, educate, refer and support the family caregivers in order to provide appropriate elders care and to relief the stress and burden of the caregiving process

Further researches are needed such as:

- There is a need to undertake studies that explore the dynamics of changing family relations, and reasons for silence of older adults on experience of elder abuse.
- Studies should be conducted to ascertain how older people can play a in designing participating in prevention programs, this can help them raise awareness about their rights, address the problems related to social exclusion and help to empower them. Moreover, more rigorous standards are needed in scientific research on elder abuse in Egypt.

Table (1): Distribution of the study subjects according to their socio-demographic characteristics and clinical data.

Item	No (100)	%
Age (years)		
60 – <75	49	49.0
75 – <85	38	38.0
85+	13	13.0
Mean ± SD	72.76 ±	-9.60
Sex		
Female	63	63.0
Male	37	37.0
Socio-economic		
Widowed	79	79.0
Single	10	10.0
Divorced	7	7.0
Married	4	4.0
Education		
Illiterate	52	52.0
Read and write	19	19.0
Primary	16	16.0
Preparatory	10	10.0
Secondary	2	2.0
University	1	1.0
Health profile:		
Medical disease		
No	8	8.0
Yes	92	92.0
Affected system*(92)		
Gastrointestinal disorders	54	58.7
genitourinary diseases	33	35.9
Musculoskeletal disorders	32	34.8
Cardiovascular disorders	21	22.8
Metabolic disorders	18	19.6
Neurological problems	12	13.0
Use of assistive devices		
No	63	63.0
Yes	37	37.0

^{*} More than one answers

Table (2): Distribution of the study subjects according to mean score of their quality of life using LEIPID scores and its subscales.

LIPID Subscales		50% Good		- <75 Fair	≥75% Poor		Total score Min. –	Percent score Min. – Max.
	No	%	No	%	No	%	Max. Mean ± SD.	Mean ± SD.
Physical functioning scale	20	20.0	48	48.0	32	32.0	5.0 - 13.0 10.12 ± 2.41	33.33 – 86.67 67.47± 16.06
Self-care scale	20	20.0	23	23.0	57	57.0	$3.0 - 18.0$ 13.53 ± 5.16	16.67 – 100.0 75.17±28.64
Depression and anxiety scale	9	9.0	23	23.0	68	68.0	2.0 - 12.0 9.43 ± 2.38	$16.67 - 100.0$ 78.58 ± 19.86
Cognitive functioning scale	22	22.0	35	35.0	43	43.0	$2.0 - 15.0$ 10.63 ± 3.87	$13.33 - 100.0$ 70.87 ± 25.82
Social functioning scale	21	21.0	45	45.0	34	34.0	0.0 - 9.0 5.68 ± 2.88	$0.0 - 100.0$ 63.11 ± 31.97
Life satisfaction scale	36	36.0	31	31.0	33	33.0	$2.0 - 17.0$ 11.87 ± 4.06	$11.11 - 94.44$ 65.94 ± 22.58
Perceived personality disorders scale	5	5.0	23	23.0	72	72.0	$11.0 - 22.0$ 18.09 ± 3.19	$45.83 - 91.67$ 75.38 ± 13.30
Anger scale	56	56.0	24	24.0	20	20.0	1.0 - 12.0 5.38 ± 3.24	$8.33 - 100.0$ 44.83 ± 26.98
Social desirability scale	3	3.0	33	33.0	64	64.0	2.0 - 9.0 6.79 ± 1.65	$22.22 - 100.0$ 75.44 ± 18.37
Self-esteem scale	42	42.0	41	41.0	17	17.0	0.0 - 9.0 5.18 ± 1.87	$0.0 - 100.0$ 57.56 ± 20.73
Trust in God scale	3	3.0	1	1.0	96	96.0	0.0 - 6.0 5.78 ± 1.07	0.0 - 100.0 96.33 ± 17.82
LEIPID overall	12	12.0	43	43.0	45	45.0	66.0 - 128.0 97.02 ± 22.94	44.0 - 87.07 66.0 ± 15.61

Table (3): Distribution of the study subjects according to the mean score of their abuse experience

	Total score	Percent score
Item	Min. – Max.	Min. – Max.
	Mean ± SD.	Mean \pm SD.
Personal rights	0.0 - 5.0	0.0 - 100.0
	1.72 ± 1.60	34.40 ± 31.92
Vulnerability	0.0 - 2.0	0.0 - 66.67
_	1.07 ± 0.84	35.67 ± 28.13
Situations	1.0 - 6.0	14.29 – 85.71
	2.86 ± 1.42	40.86 ± 20.31
Overall abuse	2.0 – 11.0	13.33 – 73.33
	5.65 ± 2.48	37.67 ± 16.56
	No	%
Not abuse	12	12.0
Abuse	88	88.0

Table (4): The relation between socio-demographic characteristics of the study subjects and their quality of life using LEIPID scale ${\bf r}$

quanty of me using ELH ID s		EIPID (qu	uality of	life)				P
Item	<50%	<50% Good 50 – <75			≥759	% poor		
	(n:	(n=12) Fair		(n=45)				
		(n=43)						
	No	%	No	%	No	%		
Age (years)								
60 – <75	6	50.0	25	58.1	18	40.0	3.146	MCp=
75 – <85	5	41.7	13	30.2	20	44.4		0.542
85+	1	8.3	5	11.6	7	15.6		
Sex								
Female	7	41.7	24	55.8	32	71.1	2.335	0.311
	5	58.3	19	44.2	13	28.9		
Male								
Marital Status								
Widowed	2	16.7	8	18.6	41	91.1	12.988*	MCp=
Single	0	0.0	3	7.0	1	2.2		0.019^{*}
Divorced	1	8.3	3	7.0	3	6.7		
Married	9	75.0	29	67.4	0	0.0		
Education								
Illiterate	3	25.0	24	55.8	25	55.6	19.242*	MCp=
Read and write	6	50.0	3	7.0	10	22.2		0.011^{*}
Primary	2	16.7	6	14.0	8	17.8		
Preparatory	1	8.3	8	18.6	1	2.2		
Secondary	0	0.0	1	2.3	1	2.2		
University	0	0.0	1	2.3	0	0.0		
Occupation before								
retirement								
Housewife	2	16.7	4	9.3	7	15.6	6.089	MCp=
Employee	2	16.7	16	37.2	7	15.6		0.174
Skilled work	8	66.7	23	53.5	31	68.9		
Income								
Not enough	1	8.3	11	25.6	13	28.9	2.148	0.342
Enough	11	91.7	32	74.4	32	71.1		

 $[\]chi^2$, p: χ^2 and p values for **Chi square test** - MC p: p value for **Monte Carlo** for **Chi** square test FE p: p value for **Fisher Exact** for **Chi** square test * Statistically significant at p ≤ 0.05

Table (5): The relation between socio-demographic characteristics of the study subjects and their abuse experience score

		Al	\Box^2	P		
Item		abuse = 12)	Abuse (n = 88)			
	No	%	No	%		
Age (years)						
60 – <75	4	33.3	45	51.1	4.569	мс _{р=}
75 – <85	8	66.7	30	34.1		0.074
85+	0	0.0	13	14.8		
Sex						
Female	2	16.7	61	69.3	12.559*	FEp=0.001*
Male	10	83.3	27	30.7		_
Socio-economic						
Widowed	9	75.0	70	79.5	1.637	мс _{р=}
Single	1	8.3	9	10.2		0.629
Divorced	1	8.3	6	6.8		
Married	1	8.3	3	3.4		
Education						
Illiterate	3	25.0	49	55.7	13.305*	MCp=
Read and write	1	8.3	18	20.5		0.009^{*}
Primary	6	50.0	10	11.4		
Preparatory	1	8.3	9	10.2		
Secondary	1	8.3	1	1.1		
University	0	0.0	1	1.1		
Occupation before retirement						
Housewife	2	16.7	60	68.2	12.287*	MCp=
Employee	6	50.0	19	21.6		$^{MC}p=0.002^*$
Skilled work	4	33.3	9	10.2		
Income						
Not enough	6	50.0	69	78.4	4.545	FEp=0.068
Enough	6	50.0	19	21.6		•

 $[\]chi^2$, p: χ^2 and p values for **Chi square test** FE p: p value for **Fisher Exact** for Chi square test

Table (6): The relation between health profile of the study subjects and their quality of life

			\Box^2	P				
Item	<5	50%	50 – < 75		≥75%			
	Good		Fair		poor			
	(n	(n=12) (n=43)			(n	=45)		
	No	%	No	%	No	%		
Medical disease(s)								
No	2	16.7	3	7.0	3	6.7	1.653	MCp=
Yes	10	83.3	40	93.0	42	93.3		0.438
Use of assistive devices								
No	5	41.7	27	62.8	14	31.1	3.013	0.222
Yes	7	58.3	16	37.2	31	68.9		

^{MC}p: p value for **Monte Carlo** for Chi square test

^{*} Statistically significant at $p \le 0.05$

 $[\]chi^2$, p: χ^2 and p values for **Chi square test** χ^2 p: p value for **Monte Carlo** for Chi square test

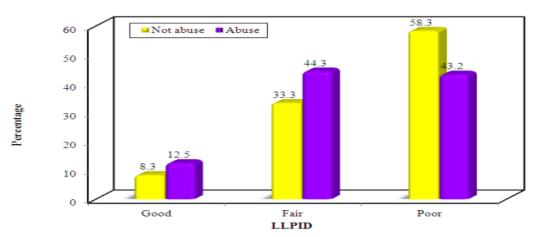
Table (7): The relation between health profile of study subjects and their abuse experience score

		Elder		FEp		
Item						
		ot abuse = 12)				
	No	%	No	%		
Medical disease(s)						
No	0	0.0	8	9.1	1.186	0.591
Yes	12	100.0	80	90.9		
Use of assistive devices						
No	8	66.7	55	37.5	0.079	1.000
Yes	4	33.3	33	62.5]	

 χ^2 , p: χ^2 and p values for **Chi square test**

FEp: p value for **Fisher Exact** for Chi square test

Figure (1): The relation between abused experience score of the study subjects and their quality of life using LIPID scale



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