Original Article

Healthline Journal Volume 13 Issue 3 (July-September 2022)

Estimation of Elder Abuse and its Associated factors in a Rural Area of Gujarat: A community based cross sectional study

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Abstract:

Introduction: The Indian population experiencing rapid ageing. By 2050, elderly would be 19.5% of the total population. The increasing elderly in society brings with new social problems having tremendous health impact. Elder abuse is a serious but neglected social problem that has adverse consequence on health. **Objective:** To measure the prevalence of elder abuse and to determine associated factors of elder abuse. **Method:** A community based cross sectional study was conducted among elderly population aged 60 years and above in the Piparia village of Vadodara district. A sample of 126 study participants were interviewed to collect data on prevalence of abuse and associated factors leading to abuse. Descriptive and inferential statistics were applied to draw conclusion from collected data. **Results:** Prevalence of elder abuse was found to be 28.57%. Emotional abuse was the commonest type of abuse reported. Socio economic status, family type, Tobacco use (Smoke and smokeless) were found to be significantly associated with elder abuse. **Conclusion:** Elder abuse is prevalent in rural Gujarat. Further evidence is needed to assess the magnitude of the problem and the type of intervention necessary to resolve it.

Keywords: Abuse, Elder, Geriatrics, Prevalence, Risk factors, Rural

Introduction:

Currently, India is experiencing unprecedented demographic changes. Increasing life expectancy and reducing fertility resulted in a 'demographic dividend'; the result was a noticeable increase in the number of elderly aged 60 and above, both in absolute and relative terms.[1] According to the 2011 census, people aged 60 and above accounted for 8.6% of the total Indian population, numbering 103 million elderly persons.[2] By 2050, the elderly population is expected to increase to 19.5% (319 million).[3] The increasing elderly population brings another social devil to the fore. That is elder abuse; this new age social problem has significant adverse health outcomes.[4]

World health organization define Elder abuse as "It is 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".[5] Elder abuse is a violation of human rights and an unconstitutional act. It includes varieties of acts like; physical, sexual, psychological and emotional abuse; financial and material abuse; abandonment; neglect; and serious loss of dignity and respect.[6]

Quick Response Code	Access this article online	How to cite this article :
	Website : www.healthlinejournal.org	Chhaya J, Patel D, Devalia J, Parmar S, Mehta B, Nandani J, Lalvani G, Patel D. Estimation of elder abuse and its associated factors in a rural area of Gujarat: A community based cross sectional study. Healthline. 2022; 13(3): 238-243.
	DOI : 10.51957/Healthline_408_2022	

Elder abuse can occur anywhere like at home, in nursing homes, or in old age homes and it is done by anyone from close family members, relatives, or neighbours; there is no specific place for elder abuse. The abuse of the elderly results in serious damage to their physical and mental health. There is a serious health cost for those who suffer from it, including a greater risk of sickness, hospitalization, and even death, and a negative impact on families and society at large.[7]

Elder abuse is a worth mentioning but neglected community problem. According to Longitudinal Ageing Study in India (LASI), In 2020, nearly 5% of India's elderly population acknowledged they had been maltreated.[1] A systemic review and meta-analysis conducted by Yon Y. et al[8] in the year 2017 is eye-opening and revealed that 1 in 6 elderly subjected to some form of abuse. The pooled prevalence was 15.7% for 60 years and older population; The pooled prevalence estimate was 11.6% for psychological abuse, 6.8% for financial abuse, 4.2% for neglect, 2.6% for physical abuse, and 0.9% for sexual abuse.[8]

Understanding the magnitude of the problem of elder abuse is critical access in the public health proceeds to prevent this type of violence. But, the lack of consensus nationwide in measuring elder abuse and its subtypes (psychological, physical, sexual, and financial abuse and neglect) has resulted in extensive variations in reported prevalence rates.[9] Available data is also scarce to derive about the prevalence of elder abuse. In the consensus of the above, the primary objective of this study was to measure the prevalence of elder abuse and determine risk factors associated with elder abuse.

Method:

The present community based cross-sectional study was conducted among elderly residents aged 60 years and above in the rural area of Vadodara from July to August 2019. The study was conducted in the village of Piparia, a field practice area of the community medicine department.

The sample size was calculated through open Epi software using single population proportion formula $n = (Z_{\alpha/2^2}) * p(1-p)/d^2$ based on the following assumption: 95% confidence interval, 5% margin of error, 80% as a power of a study, and 9% as anticipated prevalence.[1] The calculated sample size is 126. Our study participants were enrolled using a random sampling method. Based on record of family survey; we listed all the elderly individuals, totalling 374 indivisuals. Out of 374 elder indivisuals, 126 participants were selected by using a random number table.

People of age above 60 years and who provided written informed consent were included as study participants; and a person who was unable to provide information (not willing/severe mentally ill) and in a condition where a personal interview was not possible, were excluded from the study.

Data were collected in pre tested questionnaire by conducting face to face interview with each participants. Data collection tools contain information about social demographic profile (age, gender, education, occupation, income, marital status, socioeconomic status, etc.) tobacco and alcohol addiction, comorbid conditions, instances of elderly abuse, and types of elderly abuse.

Study specific definition used to consider abuse:[5,6]

- Physical abuse: when an older person is injured as a result of struck, slapped or kicked, tied down or locked in a room or having touch without his/ her permission or he/she afraid of anyone at home.
- Emotional abuse: a behaviors that harm an older person's self-worth or wellbeing or when caretaker give the silent treatment or intimidate individual with punishment/deprivation or individual felt alone due to emotional reasons
- Neglect: Intentionally failing to meet older person's basic needs including eyeglasses, hearing aid, or false teeth etc., or individual left alone for a long period.
- Financial abuse: illegally misusing an older person's money or caregiver's dependence.

A questionnaire was prepared in English; translated into the Gujarati language then back-translated into English to check the consistency. Face validity of the questionnaire was carried out. We pre-tested the final version of the questionnaire among 15 Elderly who weren't part of the sample to see whether the questions were understandable, and made corrections as necessary.

The institutional ethics committee approved the study before it began. Informed consent was

obtained from all participants before enrolment in the study. Participants in the study were given counselling and health education as well as referrals to medical facilities if they needed treatment.

Data were entered and compiled into Microsoft Excel and exported to Epi-info software for analysis. Authors did data cleaning before conducting the analysis. Descriptive and inferential statistics were applied for analysis and results were presented in tables and graphs.

Results

Total 126 subjects participated in the current study; 36 participants reported elder abuse. The prevalence of elder abuse was 28.57% in all its forms. The prevalence of emotional abuse, financial abuse, neglect and physical abuse among the elderly was 13.49%, 12.70%, 10.32% and 7.14%, respectively.

Figure 1 shows that the prevalence of physical abuse was higher among elderly females (3.97%) than elderly males (3.17%). The prevalence of Emotional abuse, neglect, and financial abuse was higher among males compared to the females. 23 males and 13 females reported elder abuse. The prevalence of elder abuse was higher among males (32.39%) compared to females (23.64%). This difference was statistically non-significant. (Chi square=1.165, df=1, p value=0.28). (Table 1)

The observed difference with abuse was statistically significant for Family type and socio economic status. However, age, gender, education level, marital status, and poverty were not significantly associated with abuse. Prevalence of elder abuse was more among ≥80 years (Oldest Old), male, Widow/widower, illiterate, Socio economic class 1, below poverty line family and nuclear family. (Table 1)

Statistically significant association was observed between abuse and use of Smokeless tobacco and use of any kind of tobacco. Occupation, Smoking, financial independence, alcohol consumption, hypertension, diabetes and chronic mental illness were not found significantly associated with abuse. Prevalence of elder abuse was more among unskilled workers, financial dependence, tobacco users in both smoke and non-smoke forms, Alcohol consumer, Hypertensive, Diabetes and chronic mentally ill compared to their counterparts. (Table 2)

Discussion:

There has never been a nationally representative study of elder abuse in India. Elder abuse still remains a hidden problem in India; many cases go unreported for a variety of reasons. This is the only study to report a prevalence of elder abuse in Gujarat. According to present study, 28.57% of elders in the community experienced abuse. The prevalence of elder abuse reported in different community-based studies in different parts of India ranged from 9.31% to 24.3%.[4,9,11–13] A Study conducted in old age homes in Davangere district, Karnataka reported a prevalence of elder abuse 35.2%; which is higher than the prevalence reported in community-based studies.[14]

Figure 1: Various types of abuse among males and females

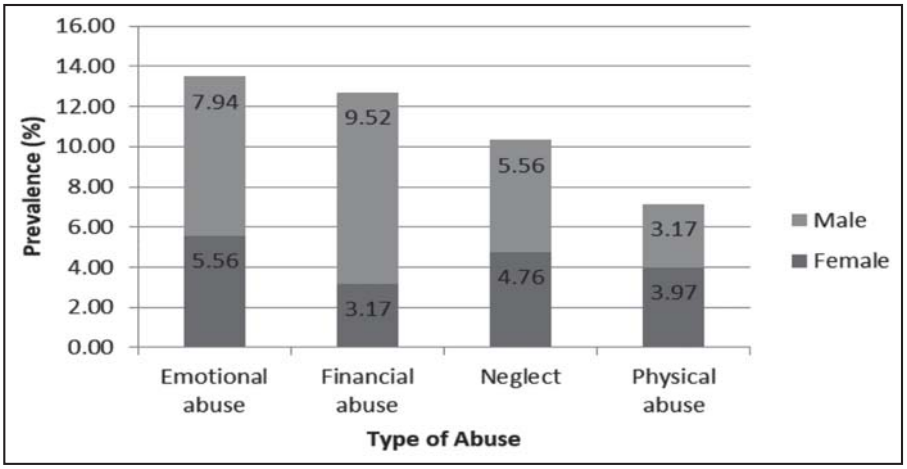

Table 1: Prevalence of abuse according to Socio-demographic Characteristics (n=126)

Socio-demographic characteristic		Abuse		Total (*n*=126)	*p* value
		Present (*n*=36)	Absent (*n*=90)		
Age Group (in years)	60-69 (Young Old)	25 (28.09%)	64 (71.91%)	89 (70.63%)	0.929
	70-79 (Old Old)	7 (28%)	18 (72%)	25 (19.84%)	
	≥80 (Oldest Old)	4 (33.33%)	8 (66.67%)	12 (9.52%)	
Gender	Male	23 (32.39%)	48 (67.61%)	71 (56.35%)	0.280
	Female	13 (23.64%)	42 (76.36%)	55 (43.65%)	
Education	Illiterate	13 (32.5%)	27 (67.5%)	40 (31.75%)	0.649
	Primary	11 (27.5%)	29 (72.5%)	40 (31.75%)	
	High school	7 (20.59%)	27 (79.41%)	34 (26.98%)	
	Graduate	4 (40%)	6 (60%)	10 (7.94%)	
	Post Graduate	1 (50%)	1 (50%)	2 (1.59%)	
Marital status	Currently Married	23 (24.47%)	71 (75.53%)	94 (74.6%)	0.057
	Unmarried	0 (0%)	3 (100%)	3 (2.38%)	
	Widow/Widower	13 (44.83%)	16 (55.17%)	29 (23.02%)	
Socioeconomic class**	Upper class	6 (60%)	4 (40%)	10 (7.94%)	0.009*
	Upper middle class	6 (18.75%)	26 (81.25%)	32 (25.4%)	
	Middle class	5 (14.29%)	30 (85.71%)	35 (27.78%)	
	Lower middle class	10 (33.33%)	20 (66.67%)	30 (23.81%)	
	Lower class	9 (47.37%)	10 (52.63%)	19 (15.08%)	
Poverty of family	Above Poverty Line	31 (27.68%)	81 (72.32%)	112 (88.89%)	0.530
	Below Poverty Line	5 (35.71%)	9 (64.29%)	14 (11.11%)	
Type of family	Nuclear	17 (47.22%)	19 (52.78%)	36 (28.57%)	0.011*
	Joint	6 (17.14%)	29 (82.86%)	35 (27.78%)	
	Extended	13 (23.64%)	42 (76.36%)	55 (43.65%)	

* Statistically Significant, ** Modified prasad classification[10]

This study reported that older people are at higher risk of abuse. Similar results were reported in various studies. [4,9,12–14] A study conducted here found that males suffered from more abuse than females, although the difference was not statistically significant. The findings were inconsistent with those of other studies; more abuse was reported among females than males in different studies. The difference might be due to different social norms in difference parts. [4,9,11–15]

Elder abuse is associated to a combination of personal, familial, economic, and psychological factors that the elderly are being ill-treated at an increasing rate. Rapid changes in the socioeconomic environment in India are causing the traditional family system to break down, resulting in changes in living arrangements and social structures that weaken the elderly's social support system.[1]

Elderly people residing in nuclear families report higher levels of abuse, while those residing in joint families report the lowest levels. Our findings are consistent with studies conducted by Sridevi H.N et al

Table 2: Prevalence of abuse according to certain variable (*n*=126)

Variable		Abuse		Total (*n*=126)	*p* value
		Present (*n*=36)	Absent (*n*=90)		
Occupation	Unemployment	2 (18.18%)	9 (81.82%)	11 (8.73%)	0.457
	Unskilled Work	4 (44.44%)	5 (55.56%)	9 (7.14%)	
	Semiskilled	3 (50%)	3 (50%)	6 (4.76%)	
	Skilled Worker	3 (27.27%)	8 (72.73%)	11 (8.73%)	
	Shopkeeper / Vendor	7 (23.33%)	23 (76.67%)	30 (23.81%)	
	Professional	7 (41.18%)	10 (58.82%)	17 (13.50%)	
	Housewife	10 (23.81%)	32 (76.19%)	42 (33.33%)	
Financially independent	Yes	3 (18.75%)	13 (81.25%)	16 (12.7%)	0.352
	No	33 (30%)	77 (70%)	110 (87.3%)	
Current Smoker	Yes	10 (35.71%)	18 (64.29%)	28 (22.22%)	0.343
	No	26 (26.53%)	72 (73.47%)	98 (77.78%)	
Smokeless Tobacco User	Yes	15 (60%)	10 (40%)	25 (19.84%)	<0.0001*
	No	21 (20.79%)	80 (79.21%)	101 (80.16%)	
Any Form of Tobacco Consumer	Yes	18 (45%)	22 (55%)	40 (31.75%)	0.005*
	No	18 (20.93%)	68 (79.07%)	86 (68.25%)	
Alcohol Consumption	Yes	8 (40%)	12 (60%)	20 (15.87%)	0.217
	No	28 (26.42%)	78 (73.58%)	106 (84.13%)	
Hypertension	Yes	16 (36.36%)	28 (63.64%)	44 (34.92%)	0.156
	No	20 (24.39%)	62 (75.61%)	82 (65.08%)	
Diabetes	Yes	12 (31.58%)	26 (68.42%)	38 (30.16%)	0.623
	No	24 (27.27%)	64 (72.73%)	88 (69.84%)	
Chronic Mental Illness	Yes	1 (100%)	0 (0%)	1 (0.79%)	0.112
	No	35 (28%)	90 (72%)	125 (99.21%)	

* Statistically significant

and Kaur J. et al. [13,15] The joint family system that exists in traditional Indian society acts as a protective barrier against elder abuse. Those who are illiterate experienced more abuse than the literate in our study. Skirbekk V. et al. find that education consistently lowers elderly abuse.[16] The prevention of elder abuse is achieved by a continuous increase in literacy. The study found that elder abuse took place more frequently among widows and widowers; similar findings have been reported by Mawar S. et al[4], Kumar P. et al[12], and Achappa S. et[14] al in their studies.

This study also found that elders from lower and lower middle socioeconomic classes experienced more abuse than those from higher socioeconomic classes. Elderly belonged to poor families were more likely to be abused. Other studies reported a higher rate of elder abuse among lower socio economic class families.[9,12] Financial struggle in the family may be a contributing factor.

It was found that those elderly; who were financial independent were less abused. Studies reported that having some form of financial income or pension provided protection against abuse. People who are financially independent or have some type of source of income reported less abuse.[4,12]

It was observed that Tobacco users, either in smoke or smokeless form and alcoholic have a higher rate of elder abuse. A similar result was also reported by Mawar S. et al in their study.[4]

Similar to other studies, we also found that chronic diseases (Diabetes, Hypertension and mental disorders) were associated with elder abuse; however, the association was statistically not significant. Being healthy offers protection from elder abuse since chronic diseases increase the risk of dependence.[4,15]

Conclusion:

Finding of this study reported that elder abuse is prevalent in different form in rural part of Gujarat. The most common type of abuse, elders suffer was emotional abuse. Literacy, Joint family and financial independence was found to be protective against elder abuse. Lower socioeconomic class, poverty, higher age, female gender, widow/widower status, use of tobacco and alcohol, and chronic ailments were significantly associated with elder abuse.

Limitation of Study:

Althoght the prevalence of elder abuse was measured, severity of abuse was not estimated in this study. Study participants belonged to village near to Vadodara so, it is difficult to completely generalize the result to whole Gujarat. The study being cross-sectional in nature does not identify the causal risk factors of elder abuse.

Declaration:

Funding: Nil

Conflict of Interest: Nil

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