

Prevalence and Patterns of Elderly Abuse in Family Environment: A Cross-Sectional Study of Hetauda Sub-Metropolitan City

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Citation: Timalina, K.P. (2023). Prevalence and patterns of elderly abuse in family environment: A cross-sectional study of Hetauda sub-metropolitan city. *International Research Journal of MMC*, 4(2), 51–59. <https://doi.org/10.3126/irjmmc.v4i2.56013>



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Abstract

The primary goal of this study is to investigate the relationship between elderly people's socioeconomic characteristics and the average rank of elderly abuse patterns. The study was primarily concerned with quantitative research and employed a cross-sectional survey method. From a population of 16,489 in Hetauda Sub-metropolitan City, 412 elderly people were chosen at random. To collect data, face-to-face interviews with structured interview schedules were used. A pilot survey was conducted to ensure validity and reliability in data. In the study, data was analysed using univariate and bivariate frequency distributions, as well as non-parametric tests. According to the study, the prevalence of overall abuse was 35.90% and psychological abuse was observed high among others. The most common types of abuse were moderate psychological abuse (43.8%), neglect (60.5%), and overall abuse (57.8%). Mild economic abuse accounted for 60%, while other types of abuse accounted for 79.4%. The study also looked at the link between abuse and gender, and found statistically insignificant differences ($p > 0.05$). However, there was a significant difference ($p < 0.05$) in the prevalence of psychological and overall abuse based on property ownership, whereas other patterns revealed no significant differences ($p > 0.05$). Except for psychological and overall abuse, dependency status had no significant impact on the occurrence of elder abuse patterns ($p > 0.05$). Except for certain participants, the prevalence of elderly abuse was high. Psychological, economic, and overall abuse varied significantly by age group, but neglect and other forms did not ($p > 0.05$). Except for psychological abuse, family size and income level were found to have significant differences in abuse patterns. The study's findings highlight the importance of targeted interventions and policies to prevent and address elder abuse, particularly among vulnerable populations. To address the identified disparities, comprehensive measures that prioritise the well-being and safety of vulnerable elders must be implemented.

Keywords: Elderly abuse, intensity of abuse, patterns of abuse, prevalence, psychological abuse.

1. Background of the Study

Ageing is the natural process of growing older that happens to everyone. It is characterised by the gradual decline of physical functions and can be identified by changes such as wrinkles, grey hair, tooth loss, difficulty walking, and reduced vision and hearing. According to Randel et al. (1999), these changes are indicative of biological ageing. According to Geriatric Centre of Nepal (GCN) (2010), "In Nepal, individuals aged over 60

years of age are considered elderly” (p. 8). Abuses and neglect for the elderly are serious societal issues that we face today. According to Tomita (1983), addressing elderly abuse is a difficult task because it frequently occurs within the confines of the home, away from public scrutiny.

Physical, neglect, sexual, financial, and psychological abuse are the five most common types of elder abuse and these can happen in different places, like at home, in care facilities, or in the community. Elder abuse perpetrators can be people related to the elderly person, caregivers, people known to them, or strangers. Elder abuse is a serious problem that affects many elderly people throughout their lives (Johannesen & LoGiudice, 2013; Ho et al., 2017).

According to the research conducted by Rai et al. (2017), the most frequent form of abuse experienced by the respondents was neglect, which was reported by 47% of them. This was followed by psychological abuse (37%), financial abuse (32%), physical abuse (8%), and sexual abuse (3%) reported by elderly individuals who were abused.

Understanding the patterns of elder abuse is critical for developing effective prevention and intervention strategies. We can work towards establishing a community that values and protects the rights of all its members, regardless of age, by raising awareness about the issue and advocating for education and assistance for older people, their caregivers, and families (Greenlee, 2013; Wongpakaran & Wongpakaran 2013; Yan, 2015).

Elder abuse can be understood through Karl Marx's class theory, which proposes that economic interactions between different social classes in society heavily influence social relationships. According to Friedman et al. (2011), because of their lower economic output and societal position, the elderly are frequently excluded and exploited in the context of the study, resulting in various forms of abuse. According to research, elder abuse is more common in lower socioeconomic groups, emphasising the importance of addressing the economic factors that contribute to this problem.

According to research, elderly mistreatment is more common among those in lower socioeconomic groups. This could be because these people have limited financial resources and are more vulnerable to mistreatment due to their reduced ability to contribute to the economy. Friedman et al. (2001) conducted a study that found a strong link between elder abuse and factors like low income, poor education, and poverty.

Physical, neglect, psychological, sexual, and financial abuse have all been identified as forms of abuse experienced by the elderly, according to research. Although research on the prevalence of elderly abuse and associated risk factors has been conducted, there is a lack of knowledge about the diversity of abuse patterns among the socioeconomic group of elderly populations (Friedman et al., 2011 & Rosen et al., 2008).

This study suggests that more research is needed to identify the differences in patterns of elder abuse among different populations and settings. Furthermore, future research should prioritise the development of effective interventions to prevent and address elder abuse.

2. Research Questions

This research paper responds to the following question:

- What is the relationship between the socio-economic characteristics of elderly individuals and the average rank of elderly abuse patterns?

3. Hypothesis

Null hypothesis (H_0): There is no significant difference in the population median of elderly abuse across various groups based on socio-economic characteristics of elderly individuals.

4. Methods and Materials

The positivist paradigm, which emphasises objectivity, empiricism, and the use of scientific methods to study phenomena, guides this research article. Ontologically, this research assumes that there is a single, objective reality that can be studied and comprehended using scientific methods. The study assumes, from an epistemological standpoint, that knowledge is derived from observable and measurable phenomena, and that this knowledge can be used to make predictions and test hypotheses. The primary goal of this research is to seek knowledge and truth rather than to rely on subjective interpretation or personal beliefs. Overall, the positivist paradigm offers a rigorous and systematic approach to research that places an emphasis on objectivity and empirical evidence. A cross-sectional survey design was used to answer the research question posed during the study. The research was carried out in the Hetauda sub-metropolitan city, with a target population of 16,489 people. Rugg and Peter (2007) recommended using the formula $n' = 1.962^2 * P(1-P) / (\text{standard error})^2$ to determine the appropriate sample size, which resulted in a sample size of 375. The estimation was increased to account for the non-response rate (9%) based on the result of pilot study and final sample size determined for this research was 412 and selected them by simple random sampling in the year 2020. A structured interview schedule was used to collect the necessary information from the sample, and the interview was completed successfully from 376 responses during data collection. In this research, a pilot study was carried out, and the value of Cronbach's alpha was calculated to be 0.826, which is considered to be within the acceptable range of reliability measurement. And to ensure content validity, the researchers consulted with experts who have extensive experience in the field of the issue being studied. To address the research questions, categorical variables were used in this study. A table displaying the distribution of univariate frequencies was used to examine the respondent's socio-demographic characteristics. Furthermore, the frequency distribution table was used to calculate the prevalence rate of elder abuse, including the various types. To investigate the hypothesis of significant differences in different patterns of abuse based on socio-demographic factors, the Mann-Whitney U Test and the Kruskal Wallis Test were also used. The researcher used a wide range of measures to ensure that ethical principles were followed throughout the research process.

5. Results

5.1 Socio-economic Characteristics of Elderly Population

Table 1 describes the socio-demographic characteristics of the elderly population. In terms of gender, males accounted for (51.86% & N=195) of the elderly population, while females accounted for (48.14% & N=181). The study is assumed elder abuse is significantly influenced by property ownership. In terms of property ownership, nearly two-thirds of the elderly (63.83%, & N=240) were found to be owners, whereas the remaining population of elders (36.17%, & N=136) were found to be non-owners. According to the study, a large number of elderly people living with their spouses. Nearly two-thirds of the older population (64.89%, & N=224) were found to be living with spouses, with the remainder (35.11%, N=132) not living with spouses. Similarly, study observed that more than half of the elderly population was illiterate (54.79% & N=206), with the remaining (45.21% & N=170) being literate. Dependence was identified as an important variable in determining the prevalence of elderly abuse in this study. The study discovered that the majority of elderly people were dependent, with more than two-thirds (67.55%, & N=254) falling into this category, while the remainder (32.45%, & N=122) were classified as independent.

Similarly, the study investigated the prevalence of elderly abuse by focusing on age as a distinguishing feature of the elderly. The study divides ages into four categories. The

majority of the elderly were found to be between the ages of 60 and 64. More than one-third (34.57%; N=130) of the elderly were found to be among the ages of 60 and 64. The 65-69 age group had the next-highest elderly population, accounting for nearly one-fourth of the population (24.20%; & N=91). The 70-74 year age group had the lowest population among the four groups, accounting for roughly one-fifth (19.68%; & N=74) of the total elderly population.

The data presented above show that a large proportion of the elderly population was in poor health. It accounted for more than two-fifth of the population (45.74%, N=172). There were (26.86% & N=101) of elderly people who were in fair health and (27.39% & N=103) who were in good health.

Furthermore, family size was considered an important socio-demographic characteristic in this study. Three groups were formed to investigate the data on family size. According to the findings, the majority of older people living in medium-sized families. A medium-sized family was home to approximately (60.90% & N=229) of older adults. Similarly, nearly one-quarter of the elderly population (23.14%, & N=87) lived in small families, while the smallest group (15.96%, & N=60) lived in larger families.

Table 1: Socio-Demographic Characteristics of Elderly People

Demographic characteristics		Frequency	Percentage
Gender	Male	195	51.86%
	Female	181	48.14%
Property Ownership	With	240	63.83%
	Without	136	36.17%
Spouse	With spouse	244	64.89%
	Without spouse	132	35.11%
Literacy Status	Literate	170	45.21%
	Illiterate	206	54.79%
Dependency status	Independent	122	32.45%
	Dependent	254	67.55%
Age Group	60-64 years	130	34.57%
	65-69 years	91	24.20%
	70-74 years	74	19.68%
	75 years and above	81	21.54%
Health status	Poor	172	45.74%
	Fair	101	26.86%
	Good	103	27.39%
Family size	Small	87	23.14%
	Medium	229	60.90%
	Large	60	15.96%
Income level	Low	208	55.32%
	Medium	94	25.00%
	High	74	19.68%

N=376

Additionally, this study found the greatest number of older people in the low-income group, which constituted over half of the elderly population (55.32%, & N=208). Similarly, nearly one-fourth of the elderly (25.00%, & N=94) belonged to the middle-income group. And nearly one-fifth of the elderly (19.68%, & N=74) belonged to the high-income group.

5.2 Prevalence of Elderly Abuse and its Patterns

The study's primary goal was to determine the prevalence and types of elderly abuse in the family setting. Elder abuse is a widespread problem around the world. It is critical to understand that the prevalence of elderly abuse varies depending on the type. Table 2 presents the distribution of elderly abuse with its patterns. As a result, psychological abuse appeared to be the most common type of abuse suffered by the elderly, accounting for more than one-third (32.18%) of all reported cases. The second most common type of abuse was neglect, which accounts for slightly more than one-fifth (20.21%) of all cases. Economic and other forms of abuse were found less common, accounting for roughly one-eighth (13.83%) and one-tenth (9.04%), respectively, of all cases. Elder abuse had an overall prevalence of nearly 36%, indicating that it was unfortunately quite common.

Table 2: Prevalence of Elderly Abuse in Family Environment

Overall and types of abuse	Yes		No		Total Count
	Count	Percentage	Count	Percentage	
Overall abuses	135	35.90%	241	64.10%	376
Patterns of Abuse					
Neglect	76	20.21%	300	79.79	376
Psychological/Emotional	121	32.18%	255	67.82%	376
Economic	52	13.83%	324	86.17%	376
Others	34	9.04%	365	90.94%	376

N=376

5.3 Intensity and Pattern of Elderly Abuse

Table 3 indicates that moderate neglect was the most common, with just under two-thirds (60.5%) of cases becoming into this category. Mild neglect was less prevalent, accounting for less than one-fifth of all cases (19.7%), and severe neglect was equally uncommon. This shows that psychological abuse was frequently experienced at a moderate level, with slightly less than half (43.8%) of cases falling into this category. Mild psychological abuse was also fairly common, accounting for more than a quarter of all cases (26.4%), while severe psychological abuse was less common but still present in nearly one-third of all cases (29.8%). This indicates that economic abuse was most commonly experienced at a mild level, with more than 60% of cases falling into this category. Moderate economic abuse was less common, accounting for just over one-quarter (26.92%) of cases, while severe economic abuse was relatively rare, present in less than 10% of cases.

Table 3: Distribution the Pattern of Elderly Abuse by Intensity

Intensity Level	Neglect N=76		Psychological Abuse N=121		Economic Abuse N=52		Other Abuses N=34		Overall Abuse N=135	
	N	%	N	%	N	%	N	%	N	%
Mild	15	19.7	32	26.4	33	63.46	27	79.4	43	31.9
Moderate	46	60.5	53	43.8	14	26.92	7	20.6	78	57.8
Sever	15	19.7	36	29.8	5	9.62	-	-	14	10.4
Total	76	100	121	100	52	100	34	100	135	100

The majority of cases of other abuse appeared to be mild, with nearly eight out of ten (79.4%) cases falling into this category. Moderate other abuse was less common, accounting for slightly more than one-fifth (20.6%) of cases, while severe other abuse was not present in this study.

5.4 Variation in the Patterns of Elderly Abuse across Socio-economic Characteristics

According to the study, there was no statistically significant difference between male and female elders in the mean ranks of all patterns of elderly abuse. All patterns of elderly

abuse and overall abuse by gender had p-values greater than 0.05, indicating that statistical differences were not observed. As a result, the evidence in the study supports the null hypothesis, which states that there is no difference in the population medians of the two groups.

In terms of significance at a 5% level, the p-values of 0.002 and 0.000 for psychological abuse and overall abuse suggest a noteworthy variance in the mean rankings of these abuses between property owners and non-property owners. This demonstrates a refusal to accept the null hypothesis that the two groups had the same population median for psychological abuse and overall abuse. However, the study discovered that the null hypothesis was not rejected for neglect, economic abuse, and other abuse because their p-values exceeded 0.05.

The difference in the mean ranks of psychological abuse between elders with and without a spouse was found to be significant, with a p-value of 0.005, at the 5% level of significance. In simpler terms, the null hypothesis that both groups had the same population median was rejected for psychological abuse. However, the null hypothesis could not be rejected for neglect, economic abuse, other abuse, and overall abuse as their p-values were greater than 0.05. This implies that there was no significant difference between the two groups in these types of abuse.

Table 4: Significant Differences of Patterns Elderly Abuse across Socio-economic Characteristics

Variables	Response Categories	Neglect		Psychological Abuse		Economic Abuse		Other Abuses		Overall Abuse	
		Mean Rank	Sig. value	Mean Rank	Sig. value	Mean Rank	Sig. value	Mean Rank	Sig. value	Mean Rank	Sig. value
Gender	Male	40.19	.468*	63.95	.397*	25.80	.642*	18.86	.343*	64.13	.249*
	Female	36.98		58.85		27.45		16.55		71.01	
Property Ownership	With	34.34	.230*	47.89	.002*	23.96	.149*	14.00	.105*	49.92	.000*
	Without	40.19		67.72		29.04		18.58		79.33	
Spouse	With	40.47	.460*	71.09	.005*	26.03	.838*	19.31	.153*	74.32	.077*
	Without	37.14		54.13		26.77		15.89		63.66	
Literacy	Literate	30.37	.068*	55.02	.270*	27.63	.670*	14.00	.176*	59.69	.097*
	Illiterate	40.50		62.80		26.00		18.25		70.91	
Dependency	Independent	35.96	.619*	42.73	.001*	25.08	.540*	14.00	.105*	48.22	.00*
	Dependent	38.98		66.00		27.32		18.58		73.65	
Health Status	Poor	40.37		69.00		29.25		19.10		74.06	
	Fair	44.60	.009#	46.30	.003#	22.64	.289#	15.21	NA	58.09	.045#
	Good	23.25		53.36		25.64		-		60.95	
Age group	60-64	33.43		48.35		20.17		14.00		57.47	
	65-69	40.85		69.57		17.50		16.13		65.75	
	70-74	33.93	.329#	53.14	.008#	33.00	.006#	17.78	.094#	68.98	.039#
Family Size	75+	42.44		71.59		31.26		23.71		76.86	
	Small	37.05		45.66		27.36		16.83		58.83	
	Mediam	41.34	.232#	67.65	.000#	27.81	.180#	18.25	NA	71.22	.048#
Income Level	Large	30.88		81.25		17.50		-		82.50	
	Low	38.01		62.71		22.95		17.50		70.31	
Income Level	Moderate	40.68	NA	59.48	0.054#	37.81	.001#	-	NA	66.72	.029#
	High	-		16.50		21.50		-		32.08	

Kruskal Wallis Test and * Mann-Whitney U Test

The study discovered no significant distinction in the rankings of various forms of elderly abuse by literate and illiterate elders. In fact, the p-values for all patterns of abuse and overall abuse by both groups were greater than 0.05, indicating that there were no statistically significant differences. This leads us to conclude that the evidence supports the null hypothesis, indicating that there was no variance in the population medians of the two groups.

In terms of dependency, psychological abuse and overall abuse had p-values of 0.001 and 0.000, respectively, which were statistically significant at the 5% level. This indicates that the mean rankings of these abuses differed significantly between independent and dependent elders. As a result, the null hypothesis that the two groups had the same population median in terms of psychological and overall abuse could be rejected. However, the study discovered that neglect, economic abuse, and other types of abuse did not differ significantly between the two groups, as their p-values were greater than 0.05, and thus the null hypothesis was not rejected for these types of abuse.

The p-values for neglect, psychological abuse, and overall abuse were 0.009, 0.003, and 0.045, respectively, indicating that differences in mean rankings of these types of abuse among elders with poor, fair, and good health were statistically significant at the 5% level of significance. As a result, the null hypothesis could be rejected, which states that the three groups had the same population median in terms of neglect, psychological abuse, and overall abuse. However, the study discovered that economic abuse did not have a significant difference among these three groups because its p-value was greater than 0.05, and thus the null hypothesis for economic abuse was not rejected.

The study discovered that there were significant differences in the mean rankings of psychological abuse, economic abuse, and overall abuse among four age groups of elders, with p-values of 0.008, 0.006, and 0.039, respectively. According to these findings, the null hypothesis, which states that the four groups had the same population median for psychological abuse, economic abuse, and overall abuse, can be rejected. However, there were no significant differences between the four groups for neglect and other forms of abuse, as their p-values were greater than 0.05, indicating that the null hypothesis could not be rejected for these groups.

According to the statistical analysis, psychological abuse and overall abuse had p-values of 0.000 and 0.048, respectively, which were statistically significant at the 5% level, indicating that the mean rankings of these abuses vary significantly among elderly people living in families of various sizes. As a result, the null hypothesis, which assumes that the three groups had the same population median in terms of psychological and overall abuse, could be rejected. However, the study discovered that there were no significant differences between the three groups in terms of neglect and various types of abuse. The p-values of these groups were greater than 0.05, indicating that there was insufficient evidence to reject the null hypothesis.

The statistical analysis revealed significant differences in the average rankings of economic abuse and overall abuse among elderly people with low, medium, and high income levels, with p-values of 0.001 and 0.029, respectively. According to these findings, the assumption of an equal population median for these types of abuse across the three income groups can be rejected. However, no significant differences in psychological abuse were discovered between these groups. The p-value for psychological abuse was greater than 0.05, indicating that the null hypothesis could not be rejected.

6. Discussions

In conclusion, this research gives insight on the incidence and kinds of elder abuse, highlighting some troubling tendencies. The statistics show that psychological abuse was the most common kind of mistreatment among the elderly, with an alarming incidence of 32.18%. Neglect came in second, accounting for 20.21% of recorded instances. Although economic abuse and other types of mistreatment were less commonly reported, it was discouraging to realise that the overall incidence of elder abuse was about 36%. These figures highlight the unpleasant truth that elder abuse was all too frequent in our culture. In

comparison to Rai et al.'s (2018) study, the study's findings indicate a relatively lower overall prevalence of abuse. The study did, however, show similar patterns of elderly abuse. Depending on the degree of severity of the various types of elder abuse, the most common type of abuse across all intensity levels was psychological abuse, followed by neglect, financial abuse, and other abuses. A large number of abuse cases were classified as moderate, with just a few cases classified as mild or severe. When compared to the finding of study carried out by Ibrahim et al. (2022), the study revealed significant differences, as their research indicated a high level of elderly abuse across all types. These differences could be attributed to differences in socio-cultural environments and research methodology. The study indicates that there was no statistically significant difference in the prevalence of abuse between genders. According to the research paper, there was a significant difference in the prevalence of psychological and overall abuse against elders with regards to property ownership, as the p-value was less than 0.05. However, this difference was not statistically significant in other patterns. The p-values for every type of elder abuse among both literate and illiterate elderly people topped 0.05, indicating that no statistically significant difference existed between the two groups. The study's findings show that, with the exception of psychological and overall forms, there was no statistically significant difference in the prevalence of elderly abuse patterns based on dependency status. Because the p-value was greater than 0.05, the observed differences in psychological and overall forms of abuse could have happened by chance. The study's findings revealed that the prevalence of elderly abuse was high in all patterns, with the exception of economic abuse among poor, fair, and good participants. The current study looked at the prevalence of abuse and neglect in four different age groups of the elderly population. The findings revealed that psychological abuse, economic abuse, and overall abuse differed significantly across age groups ($p < 0.05$). Neglect and other forms of abuse, on the other hand, did not differ significantly across age groups ($p > 0.05$). The p-value was less than 0.05, indicating that there were significant differences in psychological abuse and overall abuse among different family sizes. Except for psychological abuse, the research paper discovered significant differences in economic abuse and overall abuse patterns among elders with different income levels. The Kruskal-Wallis test p-value was less than 0.05, indicating that the differences in abuse patterns were statistically significant. This suggests that elders with low, medium, or high income may be subjected to various forms of abuse, particularly in economic aspects.

7. Conclusion

This study examined a hypothesis developed from Karl Marx's class theory and discovered significant differences in the patterns of elder abuse in some cases but not in others. The study highlights the prevalence of elder abuse, particularly psychological abuse. It also gives information on probable factors to variances in abusive behaviour, such as property ownership, age group, family size, and income level. These findings contribute to our understanding of the complexities of elder abuse and give useful insights for interventions and prevention actions. As a result, the study concluded that the theory only partially applies to the analysis of elderly abuse in the socioeconomic environment of the study area. However, more research is needed to determine whether other factors are at work or if the sample size was insufficient to detect a significant difference. The findings highlight the importance of various interventions to prevent and address elderly abuse, particularly among vulnerable groups. More research is required to determine the factors that contribute to elderly abuse. This study emphasises the importance of policies and interventions to address these disparities and protect vulnerable elders.

8. Acknowledgement

We would like express sincere thanks to all of the respondents who took part in this survey; their contributions were important to the investigation. We would additionally like to acknowledge our research supervisors for their assistance, support, and competence during the whole study process.

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