"PREVALENCE OF ELDER ABUSE IN THE RURAL FIELD PRACTICE AREA OF BELAGAVI DISTRICT; A CROSS - SECTIONAL STUDY"

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LIST OF ABBREVIATION USED

SL. No.	ABBREVIATION	EXPANSION OF THE ABBREVIATION
1	BKPAI	Building Knowledge base of Population Ageing in India
2	CASE	Caregiver Abuse Screen
3	CD	Complete Dentures
4	CE	Completely Edentulous
5	CI	Confidence Interval
6	CINAHL	Cumulated Index to Nursing and Allied Health Literature
7	CNAA	Community Needs Assessment Approach
8	CPI	Consumer Price Index
9	CrPC	Criminal Procedure Code
10	DH	District Hospital
11	EA	Elder Abuse
12	EAN	Elder abuse and Neglect
13	EAST	Elder Abuse Screening Test
14	EM	Elder Mistreatment
15	EMBASE	Excerpta Medica dataBASE
16	EN	Elder Neglect
17	FCG	Family Caregivers
18	GOI	Government Of India
19	HAMA	Hindu Adoptions and Maintenance Act
20	ICDS	Integrated Child Development Services
21	IGNOAPS	Indira Gandhi National Old Age Pension Scheme
22	IPOP	Integrated Programme for Older Persons

23	IPV	Intimate Partner Violence
24	ITI	Industrial Training Institute
25	JAGES	Japan Gerontological Evaluation Study
26	JNMC	Jawaharlal Nehru Medical College, Belagavi
27	KAB	Knowledge-Attitude-Behaviour
28	KAHER	KLE Academy of Higher Education and Research, Belagavi
29	LCA	Latent Class Analysis
30	MAESTRO	The Malaysian Elder Mistreatment Project
31	MEDLINE	Medical Literature Analysis and Retrieval System Online
32	MGMS	Modified Geriatric Mistreatment Scale
33	Mini-COG	Mini-Cognitive
34	MMSE	Mini Mental Status Examination
35	MWPSC	Maintenance and Welfare of Parents and Senior Citizens Act
36	NCOP	National Council for Older Persons
37	NFBS	National Family Benefit Scheme
38	NGO	Non-Governmental Organizations
39	NMBS	National Maternity Benefit Scheme
40	NOAPS	National Old Age Pension Scheme
41	NPHCE	National Programme for Healthcare for the Elderly
42	NPOP	National Policy on Older Persons
43	NSAP	National Social Assistance Programme
44	NSSO	National Sample Survey Office
45	OR	Odds Ratio
46	OPD	Out Patient Department

47	PHC	Primary Health Care
48	PMVVY	Pradhan Mantri Vaya Vandana Yojana
49	PsychINFO	Psychiatry database Information
50	PubMed	Public/Publisher MEDLINE
51	PUC	Pre-University Course
52	Qol-BREF	Quality of Life questionnaire
53	RVY	Rashtriya Vayoshri Yojana
54	SC	Sub-Centre
55	SCARED	Support Concern And Resources For Eating Disorders
56	SD	Standard Deviation
57	SEC	Socio-Economic Class
58	SEM	Structural Equation Modeling
59	SPSS	Statistical Package for the Social Sciences
60	THO	Taluka Health Office
61	UK	United Kingdom
62	UN	United Nations
63	UNFPA	United Nations Population Fund
64	UNPF	United Nations Population Fund
65	UPHC	Urban Primary Health Care
66	VPBY	Varishtha Pension Bima Yojana
67	WHO	World Health Organization

ABSTRACT

INTRODUCTION

According to WHO, elder abuse 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”. According to an analysis done by WHO in 2016, the most common types are physical abuse (prevalence, 0.2–4.9%); sexual abuse prevalence, 0.04–0.82%); psychological abuse (prevalence, 0.7–6.3%); financial abuse (prevalence, 1.0–9.2%) and neglect (prevalence, 0.2–5.5%).

With the rise in the number of elderly to manifold, the country is on the verge of experiencing a tectonic shift demographically in what is popularly coming to be known as the “Grey Tsunami”. Such “Grey Tsunami” will result in the country witnessing a sudden and vast rise in the elderly population in the next two decades with a corresponding rise in their needs and the total unpreparedness of the country to address them. This is also a major concern for policy makers as elderly women have outnumbered elderly males in the last two decades and are more vulnerable on all fronts compared to elderly men.

Indians have always believed in living in a joint family system with elderly being the most respectable members in the family. But in the current age scenario, more and more nuclear families are being witnessed. Elder abuse has always been considered a western problem and its existence in India has never been acknowledged seriously. However, there is growing realization among older persons now that they are often perceived as a burden by their children. The coping capacities of the younger and older family members are now being challenged. More often than not

there is unwanted behaviour by the younger family members, which is experienced as abnormal by the elder family member. Such isolated behaviour, lack of attention, care and their exclusion in taking important decisions in the family matters makes them feel neglected and disregarded leading to loneliness and depression.

OBJECTIVES

Primary objective:

- To find out the prevalence rate of elder abuse in rural area.
- To assess the knowledge and awareness regarding different types of abuses and their determinants among the elderly people residing in rural area.

Secondary objective: To identify the redressal mechanisms of elderly facing abuse.

MATERIAL AND METHOD

A cross-sectional, questionnaire-based study was conducted by systematic random sampling in 400 elderly population of age ≥ 60 years, residing in rural field practice areas of PHC Vantamuri (Rural) in Belagavi district, Karnataka, India from 1st January 2020 - 31st December 2020. A set of pre-tested standardized questionnaires consisting of seven parts, including Modified Geriatric Mistreatment Scale, were used. House to house visits were conducted by the investigator and study participants were recruited after obtaining written informed consent. Statistical analysis was done using rates, proportion and percentages. Chi-square test and binary logistic regression analysis was done to find association of elder abuse with various socio-demographic characteristics.

RESULTS

Out of 400 study participants, 255 (63.7%) elderly belonged to the age group of 60 – 69 years. The mean age of the study subjects was 68.18 ± 7.12 years with a range of 60 – 91 years and median age was 66 years. 252 (63%) elderly were females and 148 (37%) elderly were males. Most of the participants were married (255,63.7%) and 145 (36%) were widowed/single. Among the 400 elderly subjects, most of them were living in a joint family (313, 78.25%), followed by 87 (21.75%) living in a nuclear family. Literacy status of the study participants revealed that 255 (63.7%) and 145 (36.25%) were illiterates and literates respectively. It was observed that 201 (50.2%) were unemployed/retired, 114 (28.5%) were employed and 87 (21.8%) were homemakers. Most of the participants belonged to Class V (141,35.25%) and Class IV (140,35%) socio-economic status as per modified B. G. Prasad's Classification 2021.

When asked about elderly's perception on what amounts to elder abuse the most, majority of the participants responded that it was beating/slapping (127,31.59%). 339 (84.75%) perceived that elder abuse is prevalent in society with majority believing it to be prevalent in 1 – 3 houses out of 10 houses. Maximum number of participants, i.e., 119 (29.8%) perceived that neglect/disrespect is prevalent the most in the society. The socio-demographic determinants for knowledge and awareness about elder abuse included elderly belonging to 60 – 69 years age group, reserved category, married participants, unemployed/ retired/homemaker, lower socio-economic status and elderly who owned their house.

Among the 400 elderly participants, the overall prevalence of elder abuse was found to be 68 (17%). Among all abused elders, maximum number of them were facing psychological abuse (59, 52%), followed by economic exploitation (24, 21%), neglect (23, 20%) and physical abuse (8, 7%). None of the participants had experienced sexual abuse. Majority of the victims (41,62%) responded that they were experiencing abuse for 0 – 4 years duration and 45 (66.17%) individuals experienced elder abuse almost daily. The common perpetrators of abuse were found to 'daughter-in-law' (50, 73.53%) followed by 'son' (40, 58.82%). Statistically significant association was present between the occurrence of abuse and socio-demographic characteristics such as single/widowed elderly, unemployed elderly participants, reserved category, female gender and lower socioeconomic status.

Out of all 68 elderly participants who faced abuse in any form, only 19 (27.9%) made an attempt to report it, most commonly to their relative or friends. None of the participants in this study got resolution for their issue of abuse. Most of the victims (53,77.94%) were not aware about reporting and redressal mechanisms. Only (5,7.35%) were aware about 'Maintenance and Welfare of Parents and Senior Citizens Act, 2007(MWPSC Act)', but none of them had availed any benefit under the act.

CONCLUSION

The prevalence of elder abuse was found to be low (17%) as compared to what was expected (35%). The knowledge and awareness regarding elder abuse among the participants was found to be satisfactory. The percentage of victims who reported abuse was found to be very poor as only 19 (27.9%) out of 68 made an

attempt to report it. The knowledge regarding reporting and redressal mechanisms was also found to be unsatisfactory as only 14 participants out of 68 victims were aware about any of the methods. The knowledge gap among the elderly for reporting abuse and availing redressal for the same, needs to be addressed and requires immediate action by the government, police authorities, NGOs and health authorities.

KEYWORDS

Elder abuse, Rural India, Cross-sectional study, Prevalence.

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INTRODUCTION

"Ulysses:

Free hearts, free foreheads—you and I are old;

Old age hath yet his honour and his toil;

Death closes all: but something ere the end,

Some work of noble note, may yet be done...

Come, my friends, T is not too late to seek a newer world.

Push off, and sitting well in order smite

The sounding furrows; for my purpose holds

To sail beyond the sunset, and the baths

Of all the western stars, until I die.

It may be that the gulfs will wash us down:

It may be we shall touch the Happy Isles,...

Tho' much is taken, much abides; and tho'

We are not now that strength which in old days

Moved earth and heaven, that which we are, we are;

One equal temper of heroic hearts,

Made weak by time and fate, but strong in will

To strive, to seek, to find, and not to yield".

Alfred Lord Tennyson, "Poems"
1842

According to the United Nations, elderly or older adults are persons aged 60+ years.[1] Abuse is defined as "speak to (someone) in an insulting and offensive way or treat with cruelty or violence, especially regularly or repeatedly".[2] Older adults are often wronged in various ways by their trustworthy people which results in lifelong consequences. This amounts to elder abuse, i.e., "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".[3] According to the WHO – World Report on Ageing and Health 2016, prevalence of elder abuse in high- or middle-income countries ranged from 2.2% to 14%. According to the analysis, the most common types included: physical abuse (prevalence, 0.2–4.9%); sexual abuse prevalence, 0.04–0.82%); psychological abuse, above a threshold for frequency or severity (prevalence, 0.7–6.3%); financial abuse (prevalence, 1.0–9.2%) and neglect (prevalence, 0.2–5.5%).[3]

India is a country where people always care for their elders, not out of obligation but because they respect the elderly. But since there has been a shift from joint family to nuclear family system and change in the societal values, the care for the elderly is overlooked. Presently the elders find themselves absolutely helpless and disappointed because no one in the family or the society thinks about the care that they require once they get old.

Despite of India's high progress and development on all facades globally, the benefits have still not been received by the most marginalized and neglected section – the aged. Mahatma Gandhiji once said "A nation's greatness is measured by how it treats its weakest members." Its saddening to witness that in his own nation the elderly have to face neglect and apathy.[4]

The percentage of elderly population has augmented from 5.6% in 1961 to 8.6% in 2011. This number might rise to 315 million by 2050, comprising 20% of the entire population. This longevity of life has been achieved due to betterment which has taken place financially, treatment and management facilities and drop in the fertility rates. 29% of the total population resides in urban areas and 71% in rural areas. According to Indian Population Census of 1991, the elderly males were more in number than elderly females. But in the last two decades, there was a reversal in this trend and the elderly females outnumbered the elderly males. Older women being more vulnerable on all frontages compared to older men have posed a major fear for policy makers. The life expectancy at birth between 2009 to 2013 was found to be 69.3 years and 65.8 years for females and males respectively. It was reported that, the average remaining span of life was 18 years and less than 12 years at 60 and 70 years of age respectively. There was a hike in the old-age dependency ratio from 10.9% to 14.2% from 1961 to 2011 in India. The ratio was 14.9% for females and 13.6% for males in 2011.[(5)]

The Sample Survey conducted by National Sample Survey Office (NSSO) in 2004 revealed that 65 per cent of the elderly had to depend on others for their day-to-day maintenance. Older women who were economically independent were found to be more in urban areas (17%) than in rural areas (14%), and the rest of the older women were found to be dependent on others. Majority of the older males did not depend on others economically. The percentage more in urban areas (56%) compared to rural areas(51%).[(5)]

The Government of India has taken very few steps towards the health and social security for the aged. Under the National Health Mission, the 'National Programme for Healthcare for the Elderly' (NPHCE) offers several measures for the

care of the elderly. But the utilization of the services by the elderly has been poor as the implementation is unsatisfactory. According to the government data, the lack of infrastructure and manpower devoted towards attending the elderly is the reason for poor execution of various policies for the elderly.(4)

With the rise in the number of elderlies, the country is experiencing a tectonic shift demographically, popularly known as the "Grey Tsunami", which will result in a sudden and massive rise in the elderly population in the next two decades with a simultaneous rise in their needs and our nation is totally unprepared to manage it in future. Since major proportion of the elderly belong to the unorganized sector, they do not have access to social security or health benefits. It is disappointing to see that the older population in our country might head towards destitution and poor health in their old age days, after sacrificing so much for their children in the prime of their lives and contributing in the nation's progress. Furthermore, poor economic and social security makes the elderly helpless and dependent. In order to truly project our country as an advanced nation, we have to manage the problems of the elderly and set an example on the global platform.(4)

Elder abuse, once considered a western problem, has now started gripping its existence in India, but has never been acknowledged seriously. However, the elderly have started realizing that they are often perceived as a burden by their children. The younger and older family members find it difficult to cope up. The unwanted behaviour of the younger family members is experienced as abnormal by the elder family member. This isolation, lack of attention, care and their exclusion in taking important decisions in the family matters makes them feel neglected and disregarded leading to loneliness and depression.(6)

According to a report by UNFPA on status of elderly in India in 2016, where abuse was reported, it was higher in rural areas (12.3%) than in urban areas (8.6%) and marginally higher for women than males. The main form of abuse for men and women was verbal abuse. The least form of abuse for men was neglect but for women it was physical abuse. The main source of physical abuse for men was outside the family while for women, it was within the family. When asked regarding the source of abuse or quarrel among elderly, most of the cases reported neighbours, followed by sons, relatives and daughter-in-law. The oldest-old respondents (80 years and above) faced abuse on a higher scale at 16 per cent compared to 11 per cent each in the case of 60 – 69 and 70 - 79 years old. More elderly in rural areas were exposed to one or the other form of abuse than those in urban areas. There was no significant difference found with respect to marital status. The elderly living alone were the most vulnerable to abuse at 18%, whereas amongst elderly who lived with their spouse, children and grandchildren, 10% were found to be vulnerable. Living apart from family did not seem to protect the elderly from experiencing abuse. The elderly with no education reported higher levels of abuse compared to those with some education. Similarly, those with lower socio-economic status reported the highest proportion of abuse as compared to those with higher socio-economic status.[7]

With India undergoing a demographic transition with regards to the ageing scenario, the pressure for providing care for the elderly, economically, health wise or housing has increased. There is rising insecurity among the elderly in India. Increased breakdown is witnessed nowadays in joint and extended families. Increased lifespan leads to chronic disabilities in old age which requires help from a caretaker to manage their daily living activities. The traditional system of living with parents, respecting their decisions, opinions and looking after their health and needs, is getting replaced

by nuclear families. With change in lifestyles and generation gap, increased isolation and insecurity is felt among the aged and there is rising realization among them that they are often perceived as burden by their family. And this negligent behaviour of the younger persons often takes the form of injustice and abuse on the elderly, which usually remains hidden inside the four walls of the home.[6] Elder abuse in every form has particularly been concerning during the present pandemic as the elderly are prone to isolation, loneliness, stress, grief, depression, and anxiety during the lockdown.[8]

OBJECTIVE OF THE STUDY

1. **Primary objective:**

    a. To measure the prevalence rate of elder abuse. Residing in rural area.

    b. To assess the knowledge and awareness regarding different types of abuses and their determinants among the elderly people.

2. **Secondary objective:** To identify the redressal mechanisms of elderly facing abuse.

REVIEW OF LITERATURE

In 1969, Robert Butler, an American gerontologist and the first Director of the National Institute on Aging in the United States, coined the term 'ageism'. Ageism has always existed across time, countries, cultures, but yet does not even exist in every language. This concept is relatively new and thus, makes it challenging to make people about this and advocate for change.[9]

'Ageism' refers to the stereotypes (how we think), prejudice (how we feel) and discrimination (how we act) directed towards people on the basis of their age. It can be institutional, interpersonal or self-directed. 'Institutional ageism' refers to the laws, rules, social norms, policies and practices of institutions that unfairly restrict opportunities and systematically disadvantage individuals because of their age. 'Interpersonal ageism' arises in interactions between two or more individuals, while 'self-directed ageism' occurs when ageism is internalized and turned against oneself.[9]

With the rapid rise in elderly population in India, along with the urbanization, shift from joint to nuclear family structures and diminished social provisions, policymakers have to face various economic, health, and social challenges. In India, the majority of elderly typically do not have an independent source of income. They either depend on their family or, to a lesser extent, government social assistance programs, for their support. This traditional practice of relying of the elderly on their family will eventually exhaust the family members in the coming decades. And with the increasing burden of non-communicable diseases in India, the lack of targeted policies will pose new social challenges.[10]

'Elder abuse' is a vital public health problem and is being recognized as a serious problem on the rise in our society. Due to the absence of a nationwide uniform reporting system, under-reporting and lack of a standardized definition of elder abuse, it is difficult to quantify the prevalence of this issue. In 2017, a study was conducted using data from 52 studies in 28 countries from diverse regions, including 12 low and middle-income countries. The findings showed that over the period of one year, 15.7% of people aged 60 years and more had experienced some form of abuse.[11]

The following are the types of elder abuse: [12]

- **Physical abuse**: "someone causing bodily harm by hitting, pushing, or slapping. This also includes restraining an elderly against his/her will".
- **Emotional abuse (psychological abuse)**: "saying hurtful words, yelling, threatening, or repeatedly ignoring the elderly and also includes keeping them away from seeing close friends and relatives".
- **Neglect:** "when the caregiver does not respond to the elderly's needs and may include physical, emotional, and social needs, or withholding food, medications, or access to health care".
- **Abandonment**: "leaving elderly who needs help alone without planning for his or her care".
- **Sexual abuse: "**caregiver forcing an elderly to watch or be part of sexual acts".
- **Financial abuse**: "when money or belongings are stolen from an elderly, e.g., forging cheques, taking elderly's retirement or social security benefits, or

using their credit cards and bank accounts without their permission, changing names on a will, bank account, life insurance policy, or title to a house without permission".[12]

Risk factors:

Risk factors for elder abuse can be described at the following levels:

Individual

Risk factors include gender, poor physical/mental health of the victim, and mental disorders and alcohol/substance abuse in the abuser. Other factors which may include a shared living situation.

Relationship

Apart from a shared living situation, an abuser's dependency on the elderly (usually financial) often increases the risk of abuse. In some cases, a long history of poor family relationships often becomes the reason for abuse when the older person becomes dependent on the family. In addition, as the traditional role of women as homemakers is changing with more and more women starting to get employed in jobs, care for the elderly in the family becomes a burden, increasing the risk of abuse.

Community

Social isolation of caregivers and older persons, and lack of social support, is an important risk factor for elder abuse. The reason for isolation of elderly is either their poor physical/mental capacity, or the loss of their friends and family.

Socio-cultural

Socio-cultural risk factors include:

• Ageist stereotypes – elderly considered as frail, weak and dependent.

• Generation gap leading to poor bonding.

• Inheritance of property rights and material goods within families;

• Migration of young couples to different cities for career making, leaving older parents behind alone.

• Poor financial status to pay for care of the elderly.

According to WHO, around one in 6 people aged 60 years and above had experienced some form of abuse in community settings in 2017. Prevalence of elder abuse was found to be high even in institutional settings such as nursing homes and long-term care facilities, wherein 2 in 3 staff reportedly committed abuse. Elder abuse can cause severe physical injuries and long-lasting psychological concerns in the victims. A projected increase in elder abuse can be expected as elderly populations are rapidly increasing in many countries around the world.[13]

In 1982, the "U.N. Report of the **World Assembly on Ageing"** (also known as "the International Plan on Ageing") was published. It was the first international debate on the elderly rights proposed a plan for their enactment. The United Nations Population Funds (UNFP) was appointed for implementing the Plan of the Second World Assembly, and **"Madrid International Plan"** on ageing was presented in 2002.[14]

The 'Madrid Plan of Action' focused on three priority areas: older persons and development, advancing health and well-being into old age, and ensuring enabling and supportive environments. It provides guidelines for policymakers of Governments and non-governmental organizations, to change the perception of the societies for interacting and caring for the elderly.(15)

Legal Acts and National Welfare Programmes for Elderly in India

The Government of India has implemented various 'Acts' and legislations to safeguard the interests of the elderly in the country.

The "Hindu Adoptions and Maintenance Act (HAMA, 1956)"

The section 20(3) of the act provides for the maintenance of aged or ill parents.

Section 125 of Indian **Criminal Procedure Code (CrPC)** also provides that the elderly can claim maintenance from their children.

The **"Maintenance and Welfare of Parents and Senior Citizens Act, 2007"** makes it a lawful compulsion for the children or heirs to provide for the maintenance of their parents in the family.(14)

"National Social Assistance Programme" (NSAP, 1995)(16)

In 1995, the Government launched the NSAP, which included three schemes for the welfare of the elderly.

- The "National Old Age Pension Scheme" (NOAPS)
- The "National Family Benefit Scheme" (NFBS)
- The "National Maternity Benefit Scheme" (NMBS)

Under the NOAPS, the beneficiaries are elderly (male or female) aged 65 years or more, living below the poverty line. A monthly incentive of Rs. 75 is provided as old age pension. This scheme is implemented in the States and Union Territories under panchayats and municipalities. It was renamed as "Indira Gandhi National Old Age Pension Scheme" (IGNOAPS) in 2007.

"Indira Gandhi National Old Age Pension Scheme" (IGNOAPS)[16]

Under IGNOAPS financial assistance is provided for elderly belonging to BPL family (as per the criteria prescribed by GOI. The amount of the monthly pension was raised from Rs. 75 to Rs. 200 per beneficiary. The state governments can contribute on top of this amount.

"Annapurna Scheme" (1999)[16]

This was a food security scheme for elderly, launched by GOI in 1999. This scheme provides food security to the older persons in the form of 10 kilograms of food grains which are provided to the beneficiary every month free of cost. It was implemented by the Ministry of Rural Development with the support of the Ministry of Food and Civil Supplies.

"National Policy on Older Persons" (NPOP, 1999)[16]

This was launched by the Ministry of Social Justice and Empowerment, GOI in January 1999. The policy provides guideline for the state governments for implementing interventions for the welfare of the elderly in a number of areas such as financial security, health care, nourishment, housing and education etc. Additionally, the efforts of the non-government organizations in this aspect were also encouraged.

"National Council for Older Persons" (NCOP, 1999)[16]

This council was established by the GOI in May 1999 with the following major objectives:

- Monitoring the implementation of NPOP and other programs for the senior citizens and providing feedback to government.
- Advocating for the actions in the best interests of the elderly.
- Providing access for the concession of older persons.

"Integrated Programme for Older Persons" (IPOP)[14]

Ministry of Social Justice and Empowerment, GOI launched this programme for the wellbeing of elderly people with the main aim of betterment of quality of life of elderly by providing basic services like housing, nutrition, medical aid and entertainment prospects, etc.

"Rashtriya Vayoshri Yojana" (RVY)[14]

Another central sector scheme, funded from the Senior Citizens' Welfare Fund, was announced by the Ministry of Social Justice and Empowerment in 2016. In this fund, all unclaimed amounts from small savings accounts, PPF and EPF were transferred. The beneficiaries include senior citizens belonging to BPL category who have age-related disabilities such as poor vision, hearing difficulties, loss of teeth and movement disabilities. The eligible beneficiaries receive assistive devices such as walking sticks, elbow crutches, walkers/crutches, hearing aids, wheelchairs, artificial dentures and spectacles etc.

"Varishtha Pension Bima Yojana" (VPBY)[14]

This scheme was launched by the Ministry of Finance, GOI in 2003 and then relaunched in 2014. This scheme provides an assured minimum pension to the senior citizens on the subscription amount.

The "Pradhan Mantri Vaya Vandana Yojan" (PMVVY)[14]

Another social security scheme was launched by GOI in May 2017 for the elderly which is implemented by Life Insurance Corporation of India (LIC). Through this scheme, when senior citizens pay an initial amount ranging from Rs 1,50,000 ($1,973.42) to a maximum of Rs 7,50,000 ($9,867.12), they can get an assured monthly pension of Rs 1,000 ($13.15) to Rs. 5000 ($65.78), based on a guaranteed return of 8% per annum (Exchange rate as on 15th June, 2020 – 1 USD = 76.01 INR). The Centre and the state government can contribute 75% and 25% of the total budget respectively.

Role of Non-Governmental Organizations (NGOs)

Although the government has announced several policies and programmes for the welfare of the elderly in our country, the implementation of these and the process of distributing the incentives is complex and time taking. Many non-governmental organizations complement the efforts of the government by providing financial and emotional support to elderly through their services, thereby, decreasing the burden.

'Help Age India' is one of the NGOs which has been working for the betterment of the underprivileged elderly since 1978. They provide services for the aged like health care, old age homes, financial allowance, cataract surgeries, cancer

care and livelihood backing etc. They also help senior citizens facing abuse and loneliness.

Another NGO, "**Agewell foundation",** started in 1999**,** works for the wellbeing of elderly. They have conducted numerous surveys that report the prevailing problems of the aged in the country. They provide services like legal aid, financial guidance, ambulance service and assistance in resolving money problems etc.[16]

Contributions of Elderly to the society

Elderly has lifetime experience of their personal and professional life, which can be useful for the younger generations in the current as well as future scenarios. Children who stay with their grandparents inherit values and morals in their initial years, which helps them build good character and personality, thus becoming responsible citizens of the future. Their understanding of culture and societies can provide stability in the current scenario of increased hate, violence and crimes. Their insight and understanding can bring families together with lesser number of cases of disputes within the family.[14]

Elder abuse and neglect are recognized as social problems more than before, both in India and internationally.[10] Traditionally in our country, the responsibility for caring of elderly is accepted by the their sons or immediate family. However, with a changing trend toward the nuclear family setting, there is increase in the vulnerability of the elderly. The traditional social support systems such as family, relatives, friends and neighbourhood, must be saved from getting withered off and elderly should be encouraged to mingle and participate more in the community. The role of young adults for being sensitive towards the needs of elderly is also vital.[14]

A national level cross-sectional general population survey was conducted in Ireland in 2012 among people aged 65 years or more, with the objective to measure elder abuse and neglect prevalence in elderly in Ireland for a period of 12 months and analyze the risk profile of the abused and that of the abusers. Data collection was done through face-to-face interviews on abuse types, socioeconomic, health, and social support characteristics of the population. Data analysis was done using descriptive statistics, logistic regression, odds ratios (OR) with 95% confidence intervals (95% CI). The results showed that the prevalence of overall elder abuse was 2.2% (95% CI: 1.41–2.94). The prevalence of financial abuse was 1.3%, psychological abuse was 1.2%, physical abuse was 0.5%, neglect abuse was 0.3%, and sexual abuse was 0.05%. The univariate analysis showed that the odds ratio for lower income was 2.39 (95% CI: 1.01–5.69), odds ratio for impaired physical health was 3.41 (95% CI: 1.74–6.65), odds ratio for mental health was 6.33 (95% CI: 3.33–12.0), and odds ratio for poor social support was 4.91 (95% CI: 2.1–11.5), which all showed significant association with a higher risk of abuse, but only social support and mental health were independent predictors. Adult children (50%) were most frequently recognized as abusers with characteristics of unemployment (50%) and addiction (20%).[18]

A cross-sectional study was conducted among 4,467 people aged 60–84 years living in seven European countries in 2009 with the objective to find association between social support, demographics, socio-economics, health characteristics and elder abuse. The data was analyzed using multivariate analyses, and significant association was seen between individuals with low levels of social support and older age or experiencing abuse, predominantly psychological abuse. The study concluded that high levels of social support may help in reducing both vulnerability and risk of elder abuse. The study highlighted the need for policy makers, clinicians and

researchers to develop intervention programmes that facilitate socialization in old age.[19]

A descriptive cross-sectional study was conducted in 212 elderly people residing in Butwal sub-metropolitan city, an urban area in Nepal, in 2015 with the objective to assess the prevalence and risk factors associated with elder abuse in urban Nepal. Two-stage cluster design was used with simple random sampling method. Data collection was done through interviews using semi-structured questionnaire. For statistical analysis, logistic regression analysis was done to identify factors associated with elder abuse. The results showed that the prevalence of elder abuse was 49.1% and prevalence rates of caregiver neglect, financial, psychological or physical mistreatment and other types (including sexual assault) were 47.2%, 11.8%, 10.8%, 1.42% and 3.3%, respectively. Factors associated with mistreatment were found to be backward class community, unemployed, widowed, divorced or separated, problems concentrating and smoking. The study concluded that elder mistreatment was common in urban Nepal, with the most common types being neglect, financial and psychological abuse. Along with standard risk factors, being a backward class, was associated with increased risk.[20]

A systematic review and meta-analysis were conducted with the objective to measure and assess variation of prevalence of elder abuse at the global and regional levels. Data was collected by searching 14 databases in which community based elder abuse prevalence studies were published from inception to 2015 and were identified. Studies that reported prevalence of previous year's abuse in elderly were selected for the evaluation. Out of 38,544 studies initially selected, 52 were eligible for inclusion. These studies were geographically diverse (28 countries). The results showed that the

pooled prevalence rate for overall elder abuse was 15·7% (95% CI 12·8–19·3). For the individual types of elder abuse, the pooled prevalence estimate was 11·6% (8·1–16·3) for psychological abuse, 6·8% (5·0–9·2) for financial abuse, 4·2% (2·1–8·1) for neglect, 2·6% (1·6–4·4) for physical abuse, and 0·9% (0·6–1·4) for sexual abuse. Meta-analysis done for studies that included overall abuse revealed heterogeneity. It was found that significant associations were present between overall abuse and sample size, income classification, and method of data collection, but not with gender. The study concluded that although a smaller number of prevalence studies were conducted in low-income and middle-income countries, one in six older adults worldwide experienced elder abuse.(11)

The Malaysian Elder Mistreatment Project (MAESTRO) study, a community-based cross-sectional study was conducted in Kuala Pilah district, Negeri Sembilan state, Malaysia for a period of one year in 2016, among 2112 elderly, with the objective to find out the prevalence of elder abuse and its associated factors. The participants were recruited by multistage sampling using the national census. Data collection was done using a validated instrument based on previous literature and the modified "Conflict Tactic Scales". The results showed that the prevalence of overall abuse was 4.5%, in which psychological abuse was found to be most commonly experienced, followed by financial, physical, neglect and sexual abuse. It was found that two or more incidences of abuse were common and more than one type of abuse was experienced by one-third of abused elders. Factors associated with overall abuse were male gender, social isolation, prior history of abuse and depression. The study concluded that elder abuse was experienced by one in every 20 elders. The study highlighted the need to increase elder protection in Malaysia by screening and implementation of interventions for elder abuse.(21)

A population-based study was conducted in New York State, 2009, among 4,156 community-dwelling, cognitively intact older adults, with the aim to describe the variation in severity of elder emotional abuse, physical abuse, and neglect and identify factors associated with more severe forms of elder mistreatment (EM). Data collection was done with the help of random digit-dial sampling and telephonic interviews. The questionnaire included Conflict Tactics Scale and DUKE Older Americans Resources and Services scales to assess EM subtypes. For each EM subtype, severity was assessed by summing the number of different mistreatment behaviours and the frequency of each behaviour. Ordinal or multinomial regression was used to predict severity of elder emotional abuse, physical abuse, and neglect. The results showed that the distribution of severity of elder mistreatment was represented by a negative/right skew. Younger age, living with the abuser only, Hispanic background, and higher education were predictors of severe emotional abuse. Physical abuse severity was found to increase with younger age and living only with the perpetrator. Higher neglect severity was associated with functional impairment, younger age, living only with the perpetrator, lower income, and lower education. The study concluded that existing EM risk factor research by operationalizing mistreatment phenomena along a continuum of severity. Findings enhance capacity to screen and report particularly vulnerable EM victims and inform targeted interventions to amend the problem. Integration of severity into EM research reproduces the clinical reality of the problem.[22]

A KAB model study was conducted in Japan, 2018, among 311 home-visit nurses, medical doctors, care managers, care workers, public health nurses, and social workers, with experience of managing cases of elder abuse, with the objective to assess and compare the perceptions of different groups of healthcare workers toward

elder abuse. The participants were distributed self-administered questionnaire which constituted questions regarding their details on demographics, knowledge, attitudes, and behaviours pertaining to elder abuse. With the help of multiple linear regression analysis, variables that predicted the healthcare workers' perceptions were analyzed. The results showed significant differences in knowledge, attitudes, and behaviours pertaining to elder abuse among the six groups. It was found that age, sex, and years of work related to the care of elderly were significant determinants of healthcare workers' perceptions of elder abuse. The study concluded that effective measures should be implemented to improve the perceptions and support the role of healthcare workers towards protecting the elderly. Educating the healthcare workers may improve their knowledge, attitudes and behaviour in dealing with elder abuse.[23]

A study with cross-sectional design was conducted in 72 PHC teams among caregivers and their dependent care recipients (N = 829), from Barcelona, Spain between 2008 and 2010. Data collection was done by interviews conducted at home, which included the "Caregiver Abuse Screen" (CASE), self-reported abuse from elderly, daily living activities and cognitive state of the elderly, anxiety and depression in caregivers and "Caregiver Burden Scale". For statistical analysis, multivariate analysis was done using logistic regression. The results showed that the caregivers were mainly women (82.8%) with a mean age of 63.3 years. Caregivers and care recipients lived in the same household in 87.4% of cases. 65.6% of care recipients were women (with a mean age of 84.2 years), and 64.2% had moderate to severe cognitive impairment. CASE study showed a prevalence of 33.4% (95% CI: 30.3-36.7) of abuse risk by the caregiver. The study concluded that prevalence of risk of abuse was high among family caregivers. Risk factors in family caregivers that were preventable included anxiety and feelings of burden. The study highlighted the

need to become aware of these risk factors and their causes to intervene and help primary as well secondary prevention.[24]

A parallel RCT was conducted between 2014 and 2016 for a period of 18 months among 464 elderly who visited health centers of 22 municipalities in Tehran, Iran. The objective of the study was to design and implement an empowerment educational intervention to prevent elder abuse. Data collection was done using standard questionnaires, including the "Elder Abuse-Knowledge Questionnaire", "Health-Promoting Behaviour Questionnaire", "Health-Promoting Lifestyle Profile II", "Barriers to Healthy Lifestyle", "Perceived Social Support", "Perceived Self-Efficacy", "Loneliness Scale", "Geriatric Depression Scale", "Multidimensional Health Locus of Control Scale", and the SCARED (stress, coping, argument, resources, events, and dependence) tool. The intervention was given in the form of 20 sessions of 45-60 minutes training over six months. Statistical analysis was done using $\chi 2$ tests, multiple linear and logistic regression. The results showed that the frequency of knowledge of elder abuse, self-efficacy, social support and health promoting lifestyle before the intervention was similar in the two groups. After the intervention it was found that the frequency of high knowledge of elder abuse (94.8% in the intervention group and 46.6% in the control group), high self-efficacy (82.8% and 7.8%, respectively), high social support (97.0% and 10.3%, respectively) and high health promoting lifestyle (97.0% and 10.3%, respectively) was significantly higher ($P \leq 0.001$) and the frequency of elder abuse risk (28.0% and 49.6%, respectively) was significantly less in the intervention group. The study concluded that educational interventions can be effective in preventing elder abuse.[25]

Another cross-sectional study was conducted in 2017 among 260 women aged 60 years and over, in Tehran, Iran. The objective of the study was to investigate the status of domestic elder abuse in elderly women and to identify associated factors. Multistage random sampling method was used and data was collected through interviews with the elderly in their homes, using the validated Domestic Elderly Abuse Questionnaire. Statistical analysis was done using ordinal logistic test to identify factors related to elder abuse. The result showed that 90.4% of the subjects had faced at least one type of abuse, among which authority deprivation (68.5%) was the most common and rejection (11.2%) the least common. The ordinal logistic analysis revealed that the likelihood of experiencing more severe abuse was significantly higher in elderly people over the age of 72 years than in the age group of 60-62 years (odds ratio, 2.07; 95% confidence interval, 1.03 to 4.17). The study concluded that domestic elder abuse was more common in older women and old age was an important risk factor for domestic elder abuse in elderly women in Tehran.[26]

A retrospective observational study was conducted among 26,229 people aged 65 years or older living in 28 municipalities in 2013 with the aim to find the prevalence of elder abuse and the factors associated with it among independent older adults in Japan. The data was obtained from the Japan Gerontological Evaluation Study (JAGES). Logistic regression analysis was done to analyse the types of elder abuse and factors associated with them. The result showed that the prevalence of elder abuse was 12.3% (11.1% in males and 13.3 in females) in which physical, psychological, and financial abuses were reported to be 1.26, 11.12, and 1.45%, respectively. Factors associated with increase in instances of elder abuse were being a woman, living with family members, poor health, and mild or severe depression. But, contrasting results were also found as age ≥85 years and being widowed, or unmarried

were associated with lower chances of experiencing abuse. The study concluded that certain demographic factors and health are associated with a greater risk of elder abuse.[27]

Using data from a national, population-based elder abuse study conducted in 2008 in the United States with a representative sample (n = 304) of past-year victims, a study was conducted to examine factors that affects help-seeking behaviour among elderly victims of emotional abuse, physical abuse, and sexual abuse. Multivariate logistic regression was done to identify help-seeking facilitators/barriers. It was found that help-seeking through reporting to police or other authorities was reported by only 15.4% of Elder Abuse (EA) victims. Help-seeking was higher among victims of physical abuse and poly-victimization. Help-seeking was lower among victims who were dependent upon their abuser and in cases where the abuser had a large network of friends. This study concluded that the issue of EA was still hidden in American society and there was a need to develop measures that incorporate victim, perpetrator, and victim–perpetrator relationship factors to promote greater help-seeking among victims.[28]

A community-based cross-sectional study was conducted in a population of 4,467 aged 60–84 years (57.3% women) residing in seven European countries (Germany, Greece, Italy, Lithuania, Portugal, Spain, Sweden) in 2009 with the objective to analyze the association between lifetime abuse and somatic symptoms, considering demographics/socio- economic, social support and health variable. The assessment of lifetime abuse (psychological, physical, sexual, financial and injury) was based on the UK study of elder abuse and the Conflict Tactics Scale-2, while assessment of somatic symptoms was done using Giessen Complaint List short

version. The result showed that somatic symptoms were reported more frequently in women than men. Multiple regression analysis found that lifetime psychological abuse was associated with higher levels of somatic symptoms among both women and men, while lifetime sexual abuse was associated with somatic symptoms only among older women, after adjusting for other demographic and socio-economic variables. Independent factors contributing to a higher level of somatic symptoms were found to be country of residence, older age, and low socio-economic status. The study concluded that there was a positive association between the experience of abuse during lifetime and the reporting of higher levels of somatic symptoms, in particular among older women. This suggested that such complaints later in life might also be related to the experience of mistreatment and not just ageing and related diseases. Prevention of violence throughout lifetime could help to anticipate somatic symptoms later in life. [29]

A secondary analysis was done in 2019 based on data from two cross-sectional studies conducted in Portugal, with the objective to identify victimization patterns based on specific abusive behaviours and the relationship of the victim with the perpetrator. The data included a representative sample of community-dwelling elderly and a convenience sample of elderly who reported elder abuse to four state and NGOs institutions. In the population-based study, prevalence of verbal abuse by others was 29%, psychological abuse from their children/grandchildren was 18%, overlooked behaviour by others was 18% and stealth by others was 15%. In the victims' survey, it was found that physical abuse by children/grandchildren was 29%, psychological abuse by children/grandchildren was 18%, polyvictimization by others was 16% and physical abuse by others was 6%. In the victims' survey, the six groups significantly differed in age, gender, civil status, living arrangements, perceived social support and

functional status. The study concluded that multi - dimensionality of elder abuse was not being included in the "classical" abuse terminologies. Elder abuse victims looking for help may denote a definite group from the group that is included in population-based prevalence surveys. The abuser profile could also be the chief feature in differentiating victims' experiences. More research work is needed for coming up with interventions for elder abuse cases and improve positive outcomes.[30]

Another cross-sectional study in 2020 was conducted among 430 elderly attending Al Qatif PHCs in Saudi Arabia with the objective to identify the knowledge of elder abuse among elderly and their attitudes towards it with the help of a questionnaire. The mean age of the respondents was 35.6 years ranging from 18 to 59 years. Both caregivers (n = 93) and non-caregivers (n = 337) constituted the participants. Maximum number of participants (97%) responded that they should take the responsibility for reporting elder abuse and neglect. Majority of the participants (91.8%) were aware that elder abuse and neglect was a crime and it was their responsibility to prevent it. 90.7% of the knew about financial abuse and 93.5% believed that "using swear words" can be considered abuse. 90.5% responded that "occasional manhandling" of the older people can be considered as violence/abuse. The study concluded that the participants were aware about the seriousness of the issue of abuse and neglect of elderly and considered it as their own responsibility to interfere when they come across it.[31]

A cross-sectional study was conducted in 2010 in Pathanamthitta district of Kerala, among 300 older persons with the objective to find the prevalence of elder abuse and neglect using the "Hwalek-Sengstock Elder Abuse Screening Test" (EAST). The results showed that elder abuse was prevalent in 60% of the households

and females were 2.7 times more likely to experience severe abuse than males. The most common forms of mistreatment were neglect and verbal abuse, followed by physical abuse and economic exploitation. The main abusers were sons, sons-in–law and daughters-in-law. The study concluded that elder abuse and neglect was prevalent in Indian households and also indicated that female elderly, especially widowed, in the age group of >80 years and physically immobile, were more likely to face abuse than others. Both the poor and the rich were vulnerable to abuse.[32]

Another exploratory study used data from a national level study which was conducted by UNFPA in 2011, named "Building Knowledge base of Population Ageing in India. (BKPAI)". The objective of the study was to find out the prevalence of elder abuse and profile of abuser among males and females. The study also analyzed the association of elder abuse with numerous socioeconomic characteristics, disability level, chronic health conditions, etc. The statistical analysis was done using descriptive statistics, chi-square test, and binary logistic regression. The results showed that the most common cause of violence was verbal abuse, both within (28%) and outside (38%) the family. Only 11% had reported physical violence within the family while economic and showing disrespect reported was 9% outside the family. Out of 9850 older adults, 10% (987) had faced elder abuse, among which 44.6% (440) and 55.4% (547) were males and females respectively. Female elderly, especially widows and those in age group of >80 years were found to be experiencing abuse more likely than others. The important determinants of elder abuse were literacy level, socio-economic status and living alone. The study concluded that both, poor and rich elderly were prone to face neglect and abuse, with recommendations that the state or central government must take actions to bring new policies or programmes to prevent elder abuse.[33]

A cross-sectional study was conducted in 2012 in the old age homes of Davangere district, Karnataka, India for a period of one year with the objective to identify the magnitude and the pattern of elder abuse experienced by the elderly, which made them to join old age home. The study used a sample of about 105 elderly residing in old age homes. The results showed that majority of the participants were in the age group of 60 – 69 years (48%) and were from rural background (71%). Females (65%) were more in number than the males (35%). The prevalence of elder abuse was recorded to be 35.2%. Majority of the residents experienced verbal abuse (70%) followed by physical abuse (13%). Daughter-in-law was the perpetrator in majority of the cases of elder abuse i.e., (45.9%), followed by their son (24.3%). The study concluded that the prevalence of elder abuse was on the higher side, due to which they had join old age home.[34]

Another cross-sectional, observational study was conducted in 2013 at a tertiary care-center in Jamnagar, Gujarat with the objective to find out the prevalence rate and determinants of abuse and its association with various sociodemographic characteristics in elderly suffering with depression. The sample size included 100 elderly patients who had depression, and were attending OPD of Psychiatry in two hospitals of Jamnagar, Gujarat. Sampling method used was simple random sampling. "Actual Abuse Tool" and "Elder Abuse Suspicion Index" were used to identify abuse. "Geriatric Depression Scale" (GDS) was used to measure depression, and "Mini Mental State Examination" (MMSE) was used to exclude dementia. Results showed that the percentage of prevalence of abuse in this was 24%. The most common type of abuse prevalent was psychological abuse (50%) followed by neglect (17%), economic exploitation (8%) and physical abuse (4%). 54% of the participants who had severe depression, had experienced abuse. The most common perpetrators of abuse were

found to be daughters-in-law (54%) and sons (42%). The predictors of abuse were found to be illiteracy and severe depression. The study concluded that there was a high prevalence of elder abuse in patients with depression and severe depression and illiteracy were important determinants for abuse.[35]

A Comparative study was conducted in 2015 among 100 subjects each in Pohir (rural area) and Jamalpur (urban area) of district Ludhiana, Punjab, India with the objective to compare perceived abuse and social neglect among 200 elderly of age 60 years and above. Data collection was done using cluster sampling technique and responses were recoded using Likert scale. Statistical analysis was done using descriptive and inferential statistics in SPSS package. The results showed that prevalence of physical abuse (25%) was higher among female elderly residing in rural areas, who were illiterate, widowed and partially dependent on caregiver. Prevalence of psychological abuse (71%), financial abuse (37%) and social neglect (74%) were found to be higher among elderly staying in urban areas. A significant association was present between psychological abuse and higher educational status. The prevalence of economic exploitation was significantly higher among male elderly who were financially independent. The study concluded that the most common form of abuse was neglect, followed by psychological abuse and economic exploitation among elderly residing in urban areas, whereas elderly residing in rural areas were found to be experiencing physical abuse more.[36]

A national level survey in 2015 was conducted by a NGO HelpAge India using a fully structured questionnaire, among the youth of urban areas in India to assess their awareness regarding elder abuse, causes of elder abuse, knowledge of prevalence of elder abuse and their intention to mediate redressal of cases of elder

abuse. Participants were recruited from 10 cities of the country with sample size of 200 (100 males, 100 females) from each city. The results showed that 73% youth had accepted existence of elder abuse. The participants were enquired if they had witnessed "instances of elder abuse", for which they responded that in their observation it was present among relatives (32.5%), followed by friends (21%) and neighbours (20%). of the participants perceived that the most common perpetrators of abuse were daughters-in-law (34.7%) and sons (23%). According to the participants, the abuser profile involved adults in the age group of 18 to 34 years and belonging to middle-income socio-economic status. 72.4% of the participants perceived that the type of abuse most commonly prevalent in the society was 'verbal abuse' followed by 43.1%, who felt it was 'neglect and isolating elderly', Overall, 60% of the participants intended to intervene in a case of abuse by asking the abuser to change their behaviour and asking the abused to fight back. The conclusion of the survey was that awareness regarding prevalence of elder abuse was present among the Indian youth. Majority of the participants intended to take actions directly. Most of the participants responded that they had observed abuse in the family, followed by friends, and neighbours.[37]

A descriptive and exploratory study was conducted in Maharashtra in 2016 using the data from the United Nations Population Fund survey named "Building Knowledge base of Population Ageing in India", with the objective to measure the prevalence rate of elder abuse and assess the abuser profile. The sample size used was 1,435 respondents aged 60 years and above. Cross-tabulation was done to assess the socioeconomic profile and elder abuse among elderly. Statistical analysis was done using multivariate logistic regression, to know the important determinants of elder abuse and neglect. Results showed that around 35% of elderly had faced any abuse.

The prevalence of verbal abuse (30.1%) was highest, followed by economic abuse (22.5%) and physical abuse (18.0%). Neighbours (56.1%), sons (43.1%), relatives (38.6%), and daughters-in-law (31.9%) were the common perpetrators in the majority of the abuse cases. Education, wealth quintile, living alone, and the presence of any disability and morbidity or injury were found to be the important determinants of elder abuse. The study concluded that the prevalence of elder abuse and neglect was quite high in Maharashtra and policies and strategies needed to be formulated in order to prevent elder abuse in Maharashtra.[38]

Help Age India conducted a survey in 2018 in India among elderly of 23 cities. The study aimed to understand the prevalence of various types of elder abuse and awareness of elderly about redressal mechanisms in Tier-1 & Tier-2 cities of India. The sample size of the study was 5,014 elders. Around 60% of the participants agreed that elder abuse is prevalent in our society, out of which, 88% responded that its existence is high. The prevalence of elder abuse was found to be 25%. The type of abuse most commonly experienced was disrespect (56%), followed by verbal abuse (49%) and neglect (33%). The main perpetrators of abuse were "sons" (57%) and "daughters-in-law" (38%). Elder abuse was reported by only 18% of the victims and only 35% of these victims got resolution for the issue. Only 11% were found to be aware of the "Maintenance and Welfare of Parents and Senior Citizens Act, 2007" (MWPSC) Act. The study concluded that there is immediate need to take actions to prevent elder abuse and improve the living situation for the elderly. [6]

A cross-sectional, community-based study was conducted among the elderly in a village of a rural PHC in Puducherry, India in 2019, where 243 elderly individuals were approached at their homes and recruited in the study after obtaining

informed consent. Data were collected using (i) questionnaire on sociodemographic details; (ii) Hwalek–Sengstock Elder Abuse Screening Test; and (iii) WHO QoL-BREF. The results showed that the percentage of prevalence of elder abuse was 50.2%. Multivariable analysis revealed that elderly with higher education status were found to have lower odds for experiencing abuse (OR 0.08, C.I. 0.01–0.4) compared to those who were illiterate. Elderly with age >80 years were more likely to experience abuse (OR 3.02, C.I. 1.1–7.9) compared to those less than 80 years. The study concluded that elderly of higher age group and illiterate elderly had more chances of experiencing elder abuse.[39]

Another cross-sectional study using data from UNFPA's "Building Knowledge Base on Population Ageing in India" (BKPAI 2011) was conducted in 2020, using bivariate and multivariate logistic regression analyses, with the aim to evaluate the association of disability/functional ability with elder abuse. The results found that the overall prevalence of elder abuse was 11.4%. The prevalence of elder abuse experienced by the elderly was 6%. The prevalence of disability/functional ability was found to increase the likelihood of elder abuse. Also, the association between functional ability and abuse was stronger among the elderly who experienced abuse in the month preceding the survey. In addition, the association between disability and elder abuse was stronger in urban areas. Another observation was that the gender variable introduced considerable disparities in the association of disability and functional ability measures, with elder abuse. While elderly men with more than two disabilities were found to be 1.85 times (95% CI: 1.23, 2.77, $p < 0.003$) more likely to experience abuse/mistreatment, women were 3.16 times (CI: 2.22, 4.49, $p < .001$) more exposed to it. The conclusion of the study was that a significant association of disability/functional ability exists with elder abuse. The determinants of

association were residence (urban/rural) and gender (male/female).[40]

A comparative, case control study conducted in 2017 - 2020, on a sample of the North Indian population, with the objective to evaluate the impact of sensitization of family caregivers (FCGs) in the form of counselling, among elder abuse and neglect (EAN) victims and compare the results with non-abused participants. The study was carried out in three stages. The first stage, provided the sample of 332 EAN patients. In the second stage, sub-sample of 150 patients, including FCGs were divided randomly into two group (Group A—control, Group B—test group). FCGs in Group B were sensitized by a psychologist in 2–4 sessions of 30 minutes each. The final stage involved follow-up of all patients. Both qualitative and quantitative approaches were used at different stages of the study to analyze the data. The results revealed that that the most common form of abuse was EN (38.6%). EN was found more when FCG was a son (52%), in the age group (21–30 years), and with low education and low income (75%). Differences between the two groups were statistically significant. FCG sensitization was found to give better results.[41]

MATERIAL AND METHOD

Belagavi district, located in northwest part of Karnataka, India, has a population of 47,79,661 according to Census India 2011 data and a projected population of 54,23,161 in 2021, as per the provisional data Issued by Directorate of Economics and Statistics, Bangalore, 2013.[42] The district is divided into ten talukas, with Belagavi taluka having a total population of 10,11,090 which is further divided into rural population of 4,91,561 and urban population of 5,19,529, according to information obtained from Taluka Health Office, Belagavi regarding ICDS survey conducted in June, 2021. Belagavi Taluka has one District Hospital (DH), one Community Health Centre CHC), 12 Primary Health Centers (PHCs), 10 Urban Primary Health Centers (UPHCs) and 70 Sub-centers (SCs) as per the details obtained from the Taluka Health Office (THO), Belagavi (Personal communication of 2nd July, 2021), out of which two UPHCs, two PHCs and 14 SCs are the field practice areas under the administrative control of Department of Community Medicine, Jawaharlal Nehru Medical College, KAHER, Belagavi.

SOURCE OF DATA:

STUDY POPULATION: This cross-sectional study was conducted among the elderly population of age ≥ 60 years, residing for at least one year in rural field practice areas of PHC Vantamuri (rural) in Belagavi taluka of Belagavi district, Karnataka state, India.

STUDY DESIGN: Community based cross - sectional study for a period of 12 months (1st January 2020 - 31st December 2020)

SAMPLE SIZE: Using the earlier study done in Maharashtra in 2016 with sample size of 1,435 respondents, p is taken as 35%.[5]

$$n = 4pq/d^2$$

Where, n = sample size

p = prevalence of elder abuse (p=35%)

q = 100 - p = 65%

d = error in the estimation of p = 5%

Therefore, $n = \frac{4 \times 35 \times 65}{5 \times 5} = 365.$

Considering no-response as 10%, n = 365 + (10% of 365) = 365 + 36.5

= 401.5 ≈ **402**.

SAMPLING PROCEDURE:

According to Census India 2011 data, the elderly population in the state of Karnataka comprises about 7.7% of its total population. The average decadal increase in the elderly population among states between 2001 and 2011 was 1%, according to census India 2001 and 2011. The total population residing in PHC Vantamuri rural field practice area is 39,952 as per the CNAA survey done in 2018 (Ref: as per the written information received by the Medical Officer, Vantamuri). This when multiplied by 7.7% + 1%= 8.7% and divided by the estimated sample size (i.e., 400) gives us the value of every n^{th} house which was approached in the community for data collection.

Therefore, n^{th} value $= \frac{39952 \times 8.7\%}{400} = 8.68 \approx$ every 9^{th} house.

If two or more elderly were present in one house, only one person was randomly included.

If the study subject was not available at first attempt, two more attempts were made by the investigator to collect data. Otherwise, the house was skipped and the next house was taken for sampling.

STUDY PROCEDURES

DATA COLLECTION was done by means of personal interview by the researcher in the house-to-house visits. Written informed consent was obtained from all the study participants before the onset of data collection and data confidentiality was maintained. At first the cognition level of the participants was tested using Mini-Cognitive test. The eligible candidates were then further asked about their Socio-demographic profile, general health conditions their experience of elder abuse. Data was collected using a pre-designed pre-tested proforma. The characteristics noted were - age, gender, marital status, address, religion, reservation category, type of family, family members, living arrangements, qualification status, occupation, ownership of the house and income (self and household).

INSTRUMENTS FOR DATA COLLECTION:

A set of pre-tested standardized questionnaires was used in this study. Part 4, 6 and 7 are modified versions of the questionnaire used in a study by Help age India in 2018 [8]. They are as follows: -

Part 1: Socio-demographic characteristics questionnaire

Part 2: General Health

Part 3: Mini Cognitive test (MINI COG)

Part 4: Elder abuse knowledge and perception questionnaire

Part 5: Modified Geriatric Mistreatment Scale (MGMS)

Part 6: Abuser profile

Part 7: Redressal mechanisms

At the end of the data collection (Dec, 2020), health talk was conducted by the investigator regarding awareness about 'Elder Abuse' at each sub-center of Vantamuri rural PHC. Pamphlets containing information on elder abuse in local language were prepared and distributed to the participants in all four sub-centers after taking their personal interview.

INCLUSION CRITERIA:

- All the elderly population of the age 60 years and above staying in rural field practice area of PHC Vantamuri(rural), during and at least one year preceding the study, were included in the study.
- Community dwelling elders living at their own home/rented house alone or with family or relatives.
- Elders speaking either Kannada, Marathi, Hindi or English, able to communicate with the interviewer.
- Elders aware of place and time, with a cut off score of ≥ 3 out of 5 in the Mini cognitive test.

EXCLUSION CRITERIA:

- Residing in long term care institutions.
- Elders unable to communicate with the interviewer e.g., post-stroke, mentally disabled or severely sensorily or cognitively impaired with a score < 3 out of 5 in the Mini cognitive test.
- Non-residents in the area in the previous 12 months or foreign nationals were excluded from the study.

DATA ANALYSIS:

Analysis was done by entering the collected data into the Excel sheet and master chart was prepared. Coding system was used for each option in the questionnaire. Data was analyzed using SPSS software Windows (Trial version 24). The study population were characterized using descriptive statistics and expressed as mean and standard deviation (SD) and percentages for quantitative variables. Frequency and proportion were used for categorical variables. Chi square test was used to know the association between two categorical variables and P value < 0.05 was considered as statistically significant. Binary logistic regression models were applied to find the association between elder abuse and the socio-demographic characteristics of the participants.

ETHICAL CLEARANCE: was obtained from the Institutional Ethics Committee on Humans Subjects' Research of the Medical College dated 01/01/2020 vide under letter (MDC / DOME / 21)

PILOT STUDY: was conducted in the month of December 2019 in the field practice area of PHC Vantamuri to assess the feasibility and sensitivity of the data collection tool. Data from 10 households was collected. The tool was validated. The information of pilot study was not included in final compilation of data.

DEFINITION OF STUDY VARIABLES:

AGE – Recorded to the nearest completed years, corresponding to participant's last birthday.

EDUCATION:

- **Illiterate** – Beneficiary who cannot read and write with understanding in any language
- **Primary** – Beneficiary who has studied from first to fifth standard.
- **Secondary** – Beneficiary who has studied from sixth to tenth standard.
- **PUC/ITI/diploma** – Beneficiary who has completed education up to PUC or any diploma or ITI.

OCCUPATION – The source of their income, as self-reported by the beneficiaries, who would earn his or her living by means of it.

Classified in our study as:

1. **Farmer**: owns his land or on a contract basis.

2. **Labourer/daily wage**: who works at any place including agricultural fields on a daily wage basis.

3. **Self-employed**: beneficiary who is not an employee under any agency or society like carpenter, plumber, painter, provision store, etc.

4. **Government employee**: beneficiary who is a permanent or contract worker.

5. **Private employee**: beneficiary who is a permanent or contract worker in any private companies or factories or NGOs.

6. **Retired/pensioner**: beneficiary who is currently not working and is receiving pension from any means.

7. **Unemployed**: beneficiary who is currently not working or is receiving any monitory benefit of any kind.

8. **Home maker**: beneficiary who looks after home, children and currently not working in any of the kind.

Type of the family[43]

1. **Nuclear**: The family consisting of married couple along with their dependent children.

2. **Joint**: It consists of number of married couples and their children who live in the same household.

3. **Broken**: A family consists of widow/ widower/ divorcee living with or without their dependent children.

SOCIOECONOMIC STATUS:

Information regarding the family size (total number of family members residing in a house) and the per capita monthly income of the family were recorded and socioeconomic status was calculated using Modified B.G. Prasad's classification (2020). This was calculated by the usage of Multiplication factor with 1961 original Prasad's classification values.

The Consumer Price Index (CPI) by old base for the original scale (1960) is 100. The scale was modified in 1982 and 2001 by introduction of linking factors to convert CPI (1982 and 2001) from the new base of 100 to the old base CPI (1960). The linking factor between 1960 and 1982 series was 4.63. The linking factor between 1982 and 2001 series was 4.93.

Average Consumer Price Index value for January 2020 (by 2001 base) is 330.[44]

$\therefore$ Multiplication factor = $\frac{\text{current index value (330)}}{\text{base index value in 2001 (100)}}$

= 3.30

Here, current index value = 330

Base index value = 100

New income value = multiplication factor × old income value × 4.63 × 4.93

= 3.30 × 100 × 4.63 × 4.93

= 7532.54

Prasad's Social Classification (1961)		**Modified B.G. Prasad's Classification (2020)**
Social Class	**Per capita monthly income limit**	**Revised for 2020 (In Rs. /month)**
I	100 and above	7533 and above
II	50 – 99	3766 – 7532
III	30 – 49	2260 – 3765
IV	15 – 29	1130 – 2259
V	Below 15	1129 and below

RESULTS

The results of the present study will be presented under following headings:

I. Socio-demographic profile of the study participants

II. General health of the study participants

III. Knowledge and perception about elder abuse of the study participants

IV. Elder abuse experience of the study participants

V. Abuser profile

VI. Redressal mechanisms

RESULTS

Out of all 402 elderly approached, 400 were included in the study and 2 participants were excluded as they could not pass the mini cognitive test. Hence, the results for 400 participants were analyzed as follows:

I. Socio-demographic profile of the study participants

Table 1: Distribution of the elderly according to the age(years)

Age (in years)	Number	Percentage
60 – 69	255	63.7%
70 – 79	108	27%
≥80	37	9.3 %
Total	**400**	**100%**

In the present study, out of 400 study participants, 255 (63.7%) elderly belonged to the age group of 60 – 69 years, 108 (27%) belonged to 70 – 79 years and 37 (9.3%) participants were above the age of 80 years. The mean ± SD age of the study subjects was 68.18 ± 7.12 years with a range of 60 – 91 years and median age was 66 years.

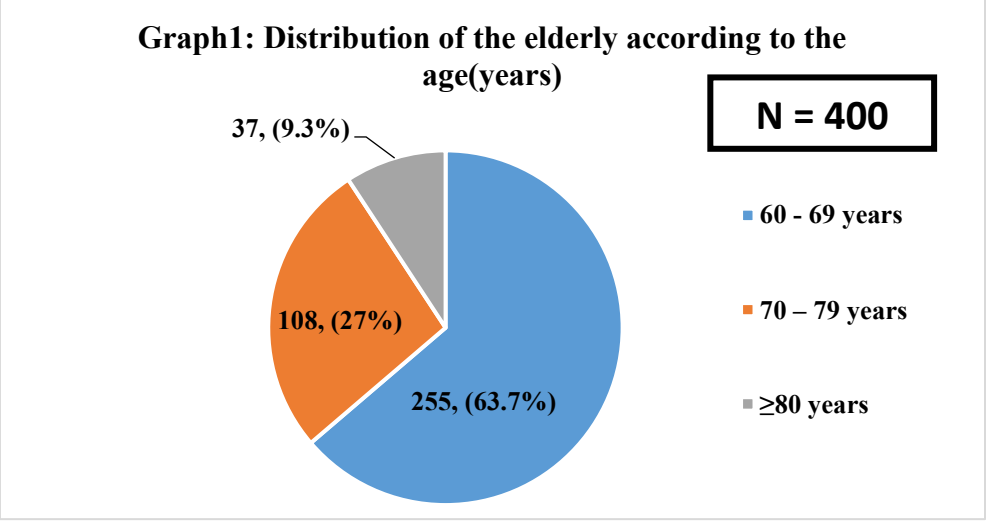


Table 2: Distribution of the elderly according to the gender

Sex	Number	Percentage
Males	148	37%
Females	252	63%
Total	**400**	**100%**

Among the 400 study participants, it was noted that 252 (63%) elderly were females and 148 (37%) elderly were males.

Graph 2: Distribution of the elderly according to the gender

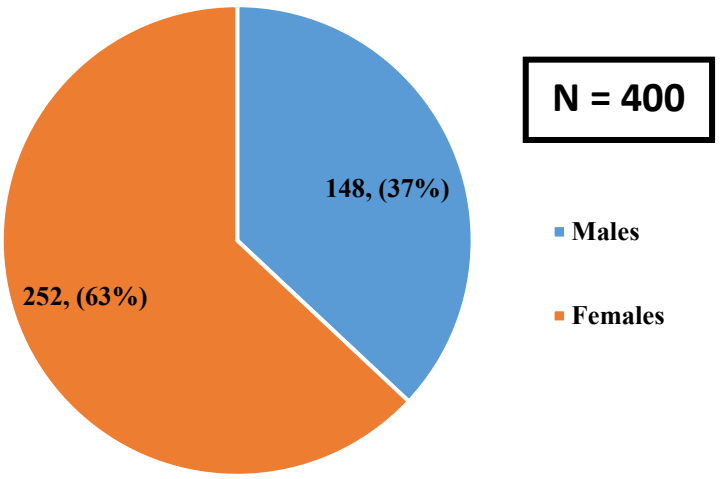


Table 3: Distribution of elderly according to the marital status

Marital status	Number	Percentage
Married	255	63.7%
Single/ Widowed	145	36.3%
Total	**400**	**100%**

Among 400 participants, 255 (63.7%) were married, 145 (36.3%) were single/widowed. None of the participants were divorced or separated.

Graph 3: Distribution of elderly according to the marital status

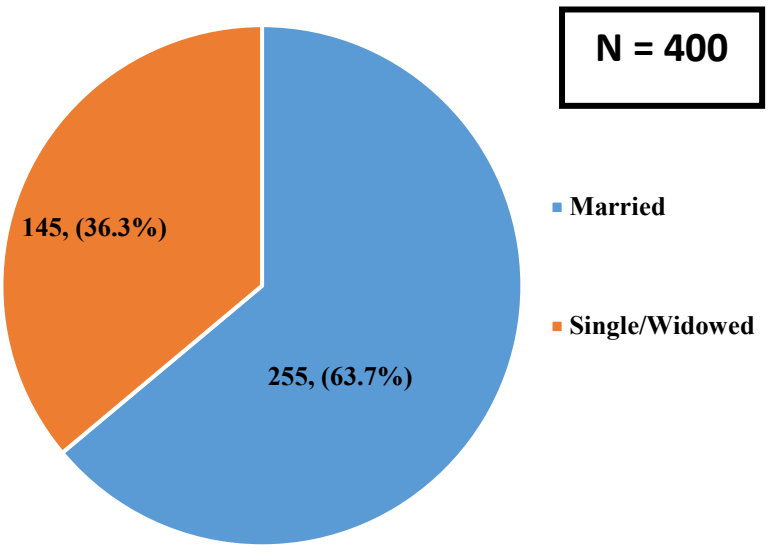


Table 4: Distribution of elderly according to the subcenters

Subcenters	Number	Percentage
Vantamuri	107	26.75%
Kakati	119	29.75%
Bhutramanahatti	87	21.75%
Honaga	87	21.75%
Total	**400**	**100%**

Among the study subjects, 119 (29.75%) belonged to Kakati sub-center, followed by 107 (26.75%) from Vantamuri and 87 (21.75%) from Honaga and Bhutramanahatti each.

Graph 4: Distribution of elderly according to the subcentres

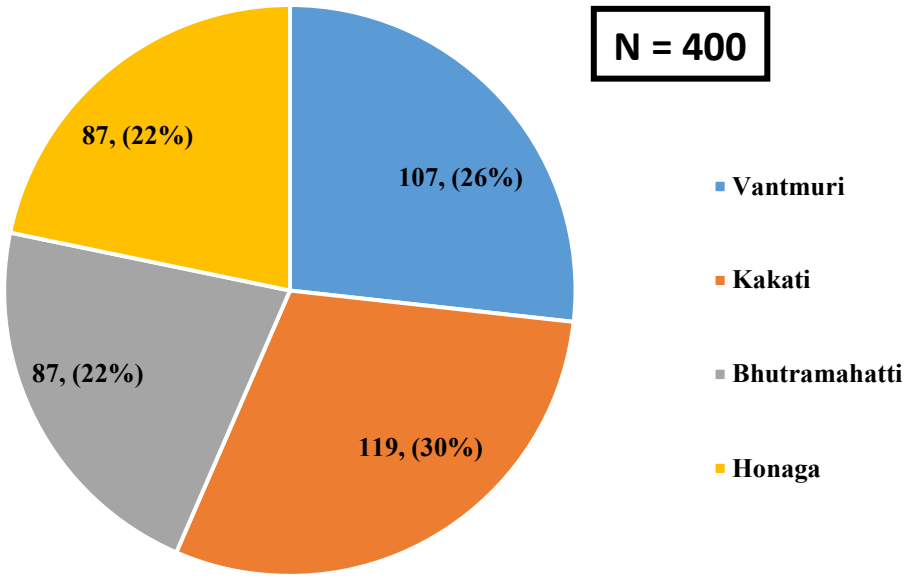


Table 5: Distribution of elderly according to religion

Religion	Number	Percentage
Hindu	350	87.5%
Muslim	46	11.5%
Christian	4	1%
Total	**400**	**100%**

Out of the total subjects studied, majority 350 (87.5%) followed Hinduism, 46 (11.5%) were Muslim and 4 (1%) participants followed Christianity.

Graph 5: Distribution of elderly according to religion

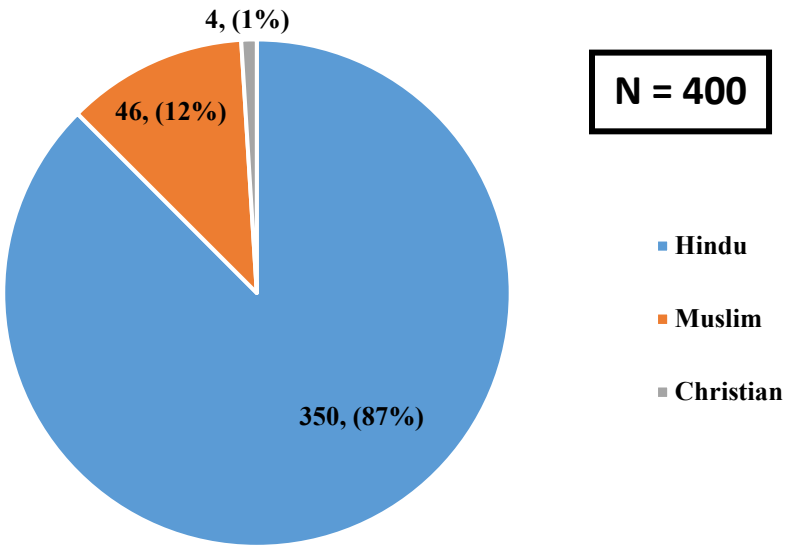


Table 6: Distribution of elderly according to the category

Category	Number	Percentage
General	91	22.75%
Scheduled Caste (SC)	25	6.25%
Scheduled Tribe (ST)	126	31.5%
Other Backward Classes (OBC)	158	39.5%
Total	**400**	**100%**

Out of 400 elderly participants, 158 (39.5%) belonged to OBC category, followed by 126 (31.5%) from ST category, 91 (22.75%) belonged to general category and 25 (6.25%) were from SC category.

Graph 6: Distribution of elderly according to the category

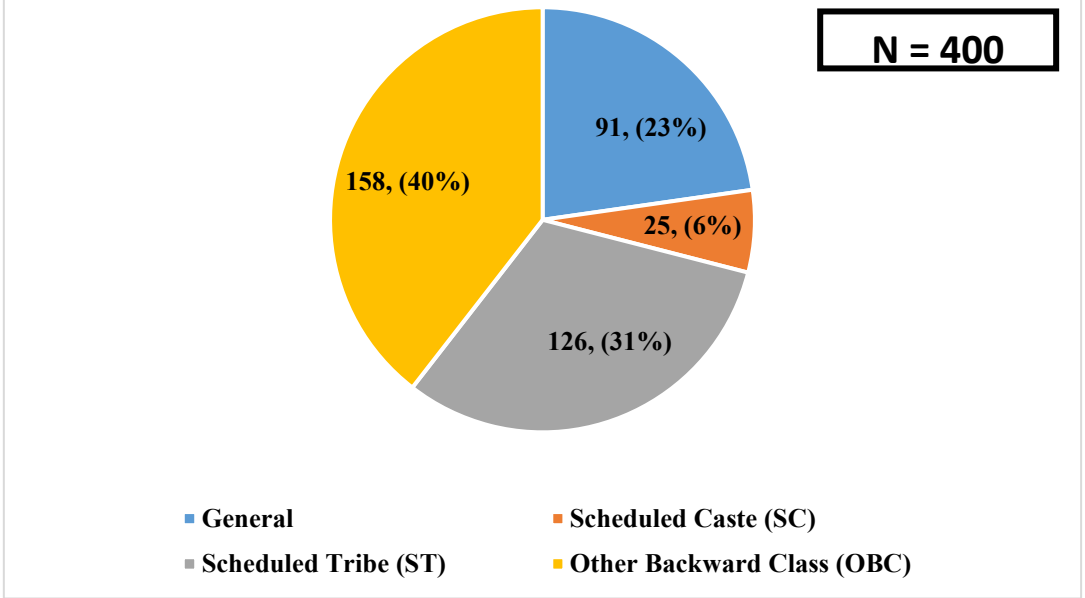


Table 7: Distribution of elderly according to the type of family

Family type	Number	Percentage
Nuclear	87	21.75%
Joint	313	78.25%
Total	**400**	**100%**

Among the 400 elderly subjects, most of them were living in a joint family (313, 78.25%), followed by 87 (21.75%) living in a nuclear family.

Graph 7: Distribution of elderly according to the type of family

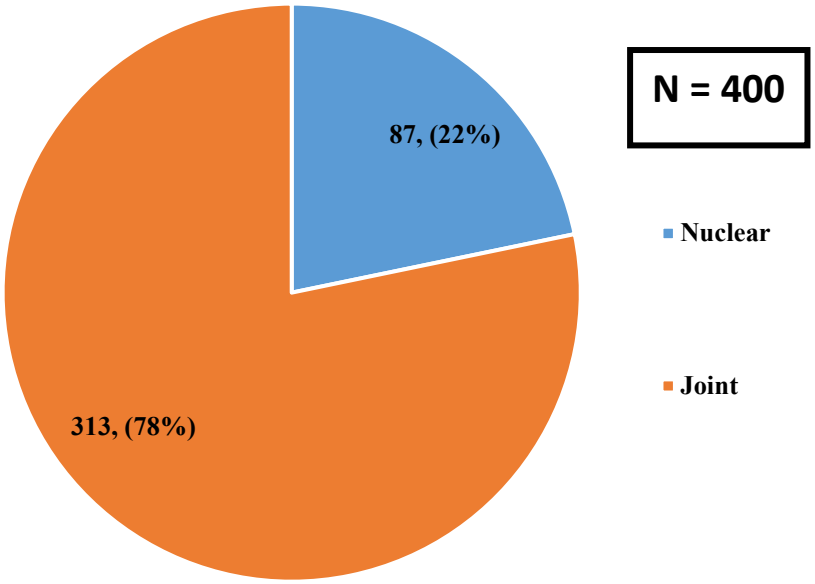


Table 8: Distribution of elderly according to the number of members in the family

Family members	Number	Percentage
1-5	176	44%
6-10	209	52.25%
11-15	11	2.75%
16-20	4	1%
Total	**400**	**100%**

Among the 400 elderly subjects, most of them were having six to ten family members (209, 52.25%), 176 participants had up to five family members (44%), followed by 11 participants (2.75%) who had eleven to fifteen family members and 4 participants (1%) who had sixteen to twenty family members.

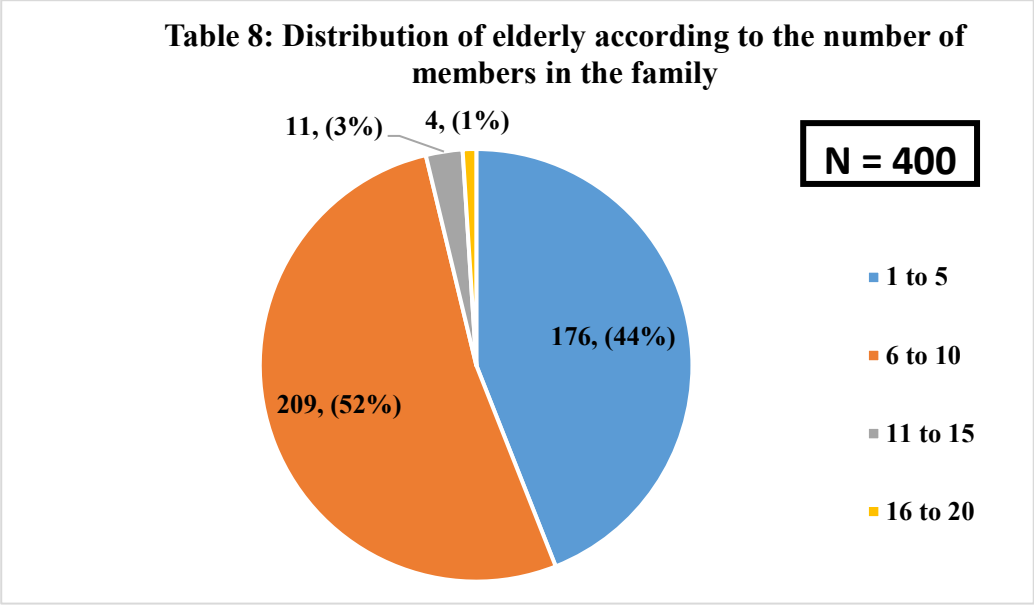


Table 9: Distribution of elderly according to the living arrangements

Living arrangements	Number	Percentage
With family	354	88.5%
With spouse only	24	6%
Alone	17	4.3%
With relative/any other	5	1.2%
Total	**400**	**100%**

Out of all the participants studied, 354 (88.5%) lived with their families, followed by 24 elderly who lived only with their spouse (6%), 17 elderly who lived alone (4.3%) and five subjects lived with a relative/any other person (1.25%).

Graph 9: Distribution of study participants elderly according to the living arrangements

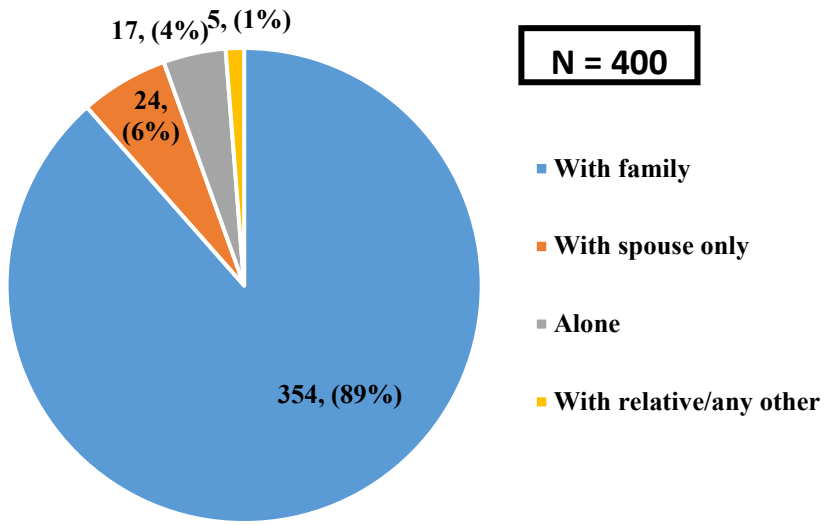


Table 10: Distribution of elderly according to the education status

Education status	Study participants	
	Number	**Percentage**
Illiterate	255	63.7%
Primary	60	15%
High school	66	16.5%
PUC/ ITI Diploma	8	2%
Graduate	11	2.8%
Total	**400**	**100%**

Literacy status of the study participants revealed that 255 (63.7%) and 145 (36.25%) were illiterates and literates respectively. Among the educated study participants, 66 (16.5%) had received high school education, 60 (15%) had received primary level of education, 11 (2.8%) were graduated and 8 (2%) had received PUC/ITI Diploma education.

Graph 10: Distribution of elderly according to the education status

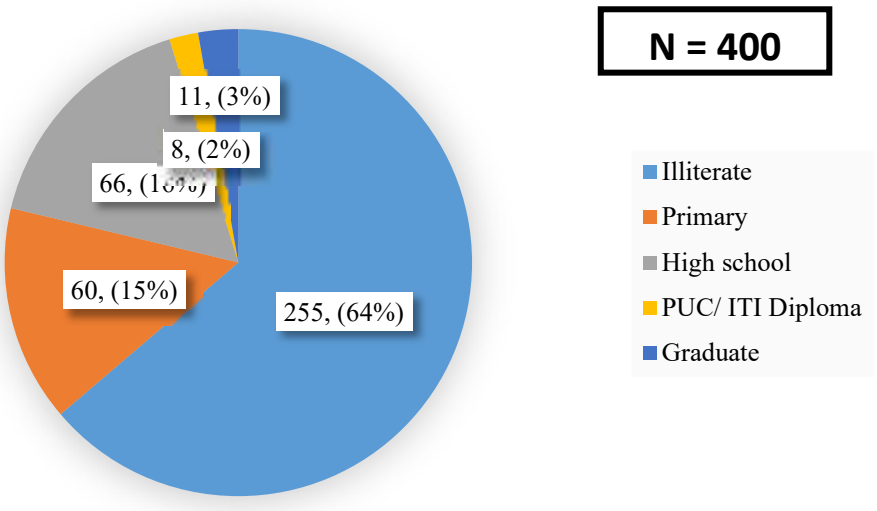


Table 11: Distribution of elderly according to occupation

Occupation	Number	Percentage
Self employed	33	8.3%
Government service	1	0.3%
Private service	6	1.5%
Farmer	59	14.8%
Labourer	13	3.3%
Homemaker	87	21.8%
Unemployed/Retired	201	50.2%
Total	**400**	**100%**

Among the 400 study participants, it was observed that 201 (50.2%) were unemployed/retired, 114 (28.5%) were employed and 87 (21.8%) were homemakers. Among the subjects who were employed, majority were agricultural farmers (59,14.8%) or self-employed (33, 8.3%). 13 elderly reported that they were working as laborer (3.3%), 6 in private service (1.5%) and only one in government service (0.3%) for extension work.

Graph 11: Distribution of elderly according to occupation

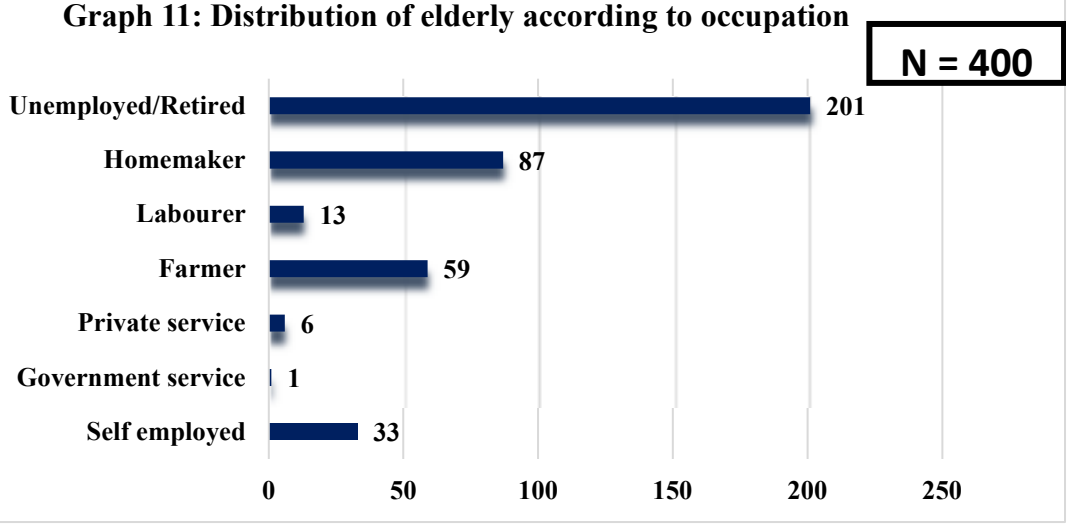


Table 12: Distribution of elderly according to the house ownership

House ownership	Number	Percentage
Self-owned	239	59.75%
Owned by spouse	83	20.75%
Owned by others	62	15.5%
Rented	16	4%
Total	**402**	**100%**

According to the study participant's house ownership status, it was noted that 239 (59.75%) elderly owned their house whereas 83 (20.75%) lived in a house owned by their spouse, 62 (15.5%) lived in a house owned by others and 16 (4%) reported to be living in a rented house.

GRAPH 12:Distribution of elderly according to house ownership

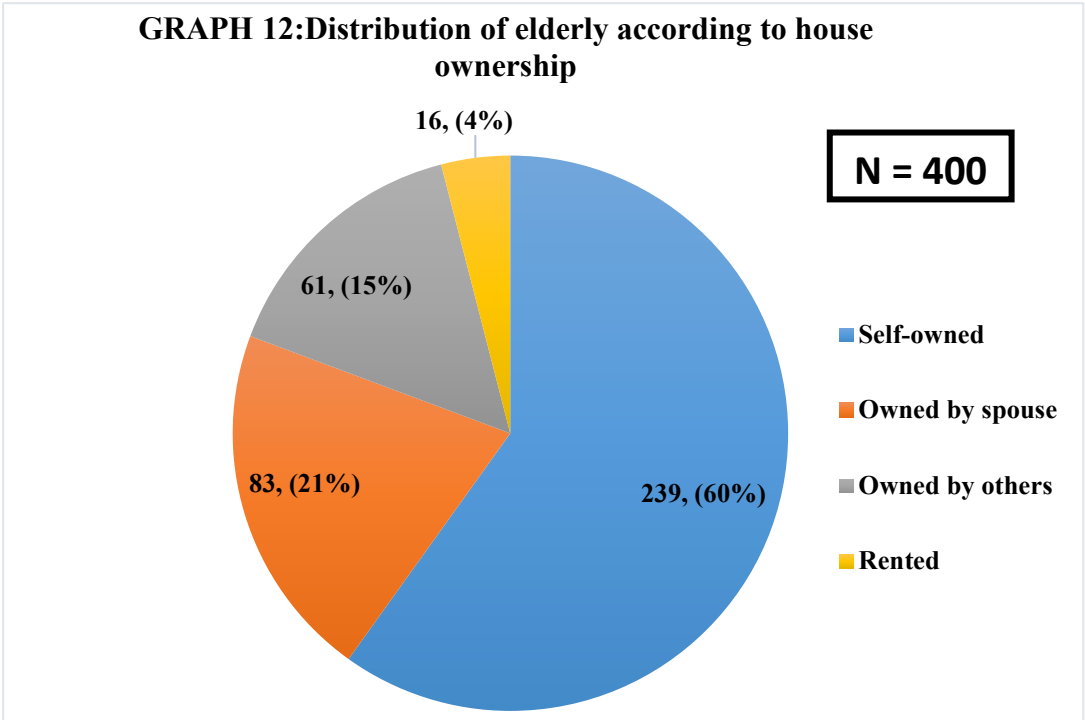
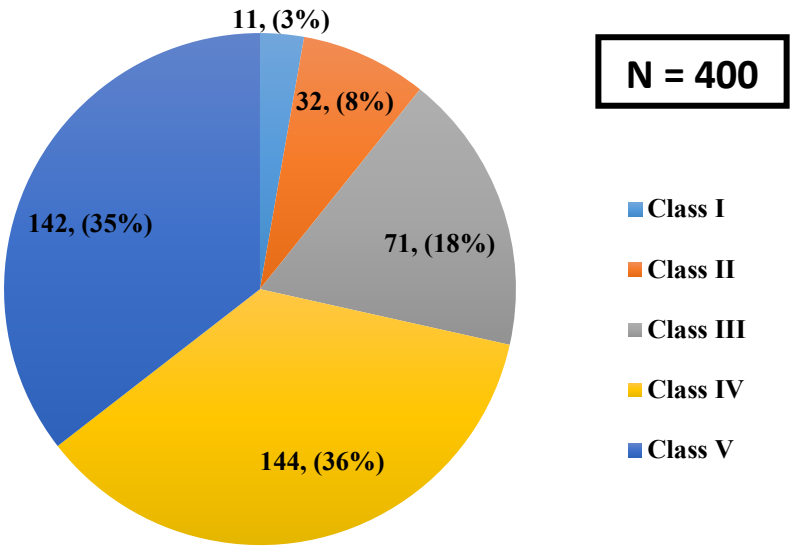


Table 13: Distribution of elderly according to the socioeconomic status

Socioeconomic Status	Number	Percentage
Class I	11	2.75%
Class II	32	8%
Class III	71	17.75%
Class IV	144	36%
Class V	142	35.5%
Total	**400**	**100%**

Among the 400 study subjects, 144 (36%) belonged to Class IV, 142 (35.5%) to Class V, 71 (17.75%) to Class III, 32 (8%) to Class II and 11 (2.8%) belonged to Class I socioeconomic status according to Modified B.G. Prasad's Classification (2020).

Graph 13: Distribution of elderly according to socio-economic status



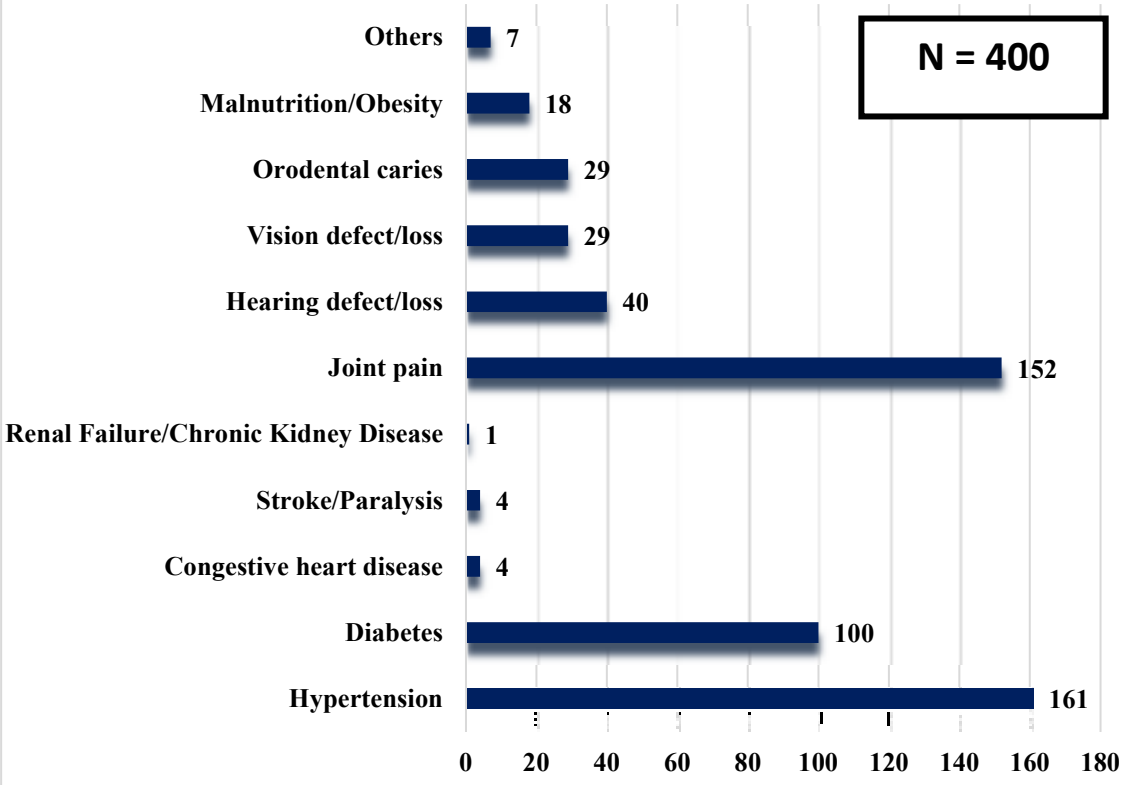
II. General health of the study participants

Table 14: Distribution of participants according to the general health status (Self reported) (multiple choice response).

Health Status	Number	Percentage
Hypertension	161	40.3%
Osteoarthritis	152	38%
Diabetes	100	25%
Hearing defect/loss	40	10%
Vision defect/loss	29	7.2%
Oro-dental caries	29	7.2%
Malnutrition/Obesity	18	4.5%
Others	7	1.8%
Congestive heart disease	4	1%
Stroke/Paralysis	4	1%
Renal Failure/Chronic Kidney Disease	1	0.3%

When the elderly participants were asked about their health status, it was noted that 161 (40.3%) elderly had hypertension, 152 (38%) participants suffered from osteoarthritis, 100 (25%) had diabetes, 40 (10%) had hearing defect/loss, 29 (7.2%) had vision defect/loss and oro-dental caries each, 18 (4.5%) were had undergoing malnutrition/obesity, 4 (1%) suffered from congestive heart disease and stroke/paralysis each, 1 (0.3%) was a case of renal failure/chronic kidney disease and 7 (1.8%) elderly reported other health problems.

Graph 14: General health status of the study participants



III. Elder abuse knowledge and perception of the study participants

Table 15: Distribution of participants according to the perception on what amounts to elder abuse the most (N=400)

Type of elder abuse	Yes	%	No	%	Don't Know	%	TOTAL	%
Neglect/Disrespect	36	9%	327	81.8%				
Beating/Slapping	127	31.8%	236	59%				
Verbal abusing	61	15.3%	302	75.5%				
Economic exploitation	42	10.5%	321	80.3%				
Unwelcome/ Forcible sexual contact	101	25.3%	262	65.5%	37	9.3%	400	100%

When asked about elderly's perception on what amounts to elder abuse the most, 127 (31.59%) responded that it was beating/slapping, followed by 101 (25.3%) who responded that it was unwelcome/forcible sexual contact, 61 (15.17%) responded that it was verbal abusing, 42 (10.45%) responded that it was and 36 (8.96%) responded that it was neglect/disrespect. 37 (9.2%) elderly responded by saying "Don't Know".

Graph 15: Perception of subjects on what amounts to 'elder abuse the most'

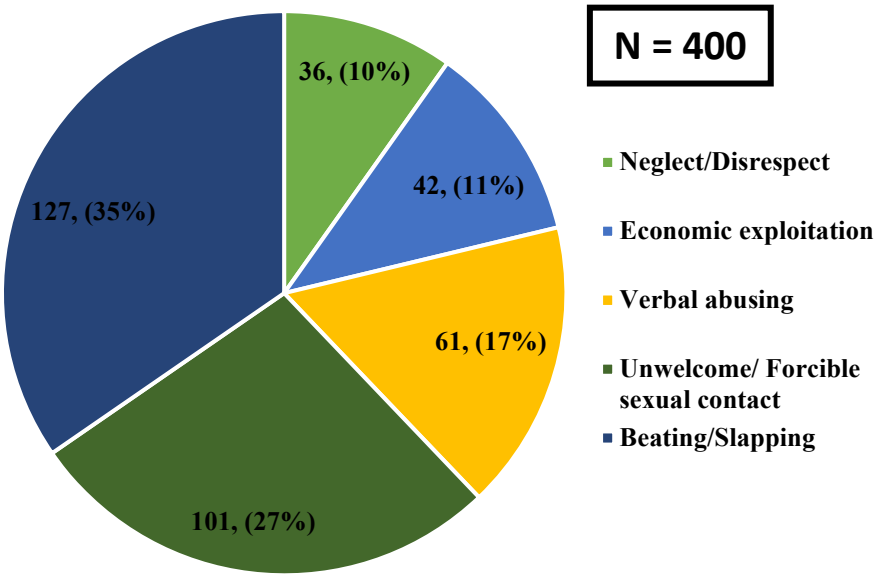


Table 16: Distribution of participants according to the perception about prevalence of elder abuse in any form.

Is elder abuse prevalent?	Number	Percentage
Yes	339	84.75%
No	33	8.25%
Maybe	28	7.0%
Total	**400**	**100%**

Out of 400 elderly participants who were asked about their perception on prevalence of elder abuse in any form, 339 (84.75%) responded that it was prevalent and 33 (8.25%) responded that it was not. 28 (7%) responded that it "might be" prevalent in the society.

Graph 16: Perception of subjects about prevalence of elder abuse in any form

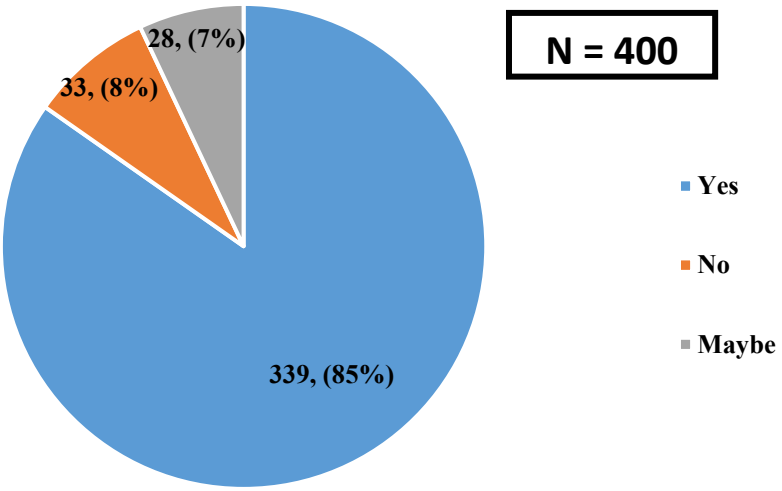


Table 17: Distribution of participants according to the perception about prevalence of elder abuse (out of 10 houses).

Elder abuse prevalence (Out of 10 houses)	Number	Percentage
5	79	19.8%
2	62	15.5%
4	61	15.3%
0	33	8.3%
3	44	11%
6	25	6.3%
1	24	6%
8	15	3.8%
10	13	3.3%
7	9	2.3%
9	5	1.3%
Don't Know	30	7.5%
Total	**400**	**100%**

The elderly participants were also asked about their perception on the prevalence of elder abuse out of 10 houses. 79 (19.65%) perceived the prevalence to be 5 out of 10 houses, 62 (15.42%) perceived the prevalence to be 2 out of 10 houses, 61 (15.17%) perceived the prevalence to be 4 out of 10 houses, 44 (10.95%) perceived the prevalence to be 3 out of 10 houses, 25 (6.22%) perceived the prevalence to be 6 out of 10 houses, 24 (5.97%) perceived the prevalence to be one out of 10 houses, 15 (3.73%) perceived the prevalence to be 8 out of 10 houses, 13 (7.46%) perceived the prevalence to be 10 out of 10 houses, 9 (2.24%) perceived the prevalence to be 7 out of 10 houses, 5 (1.24%) perceived the prevalence to be 9 out of 10 houses and. 30 (7.46%) elderly responded as, "Don't Know".

Graph 17: Perception of subjects about prevalence of elder abuse out of 10 houses

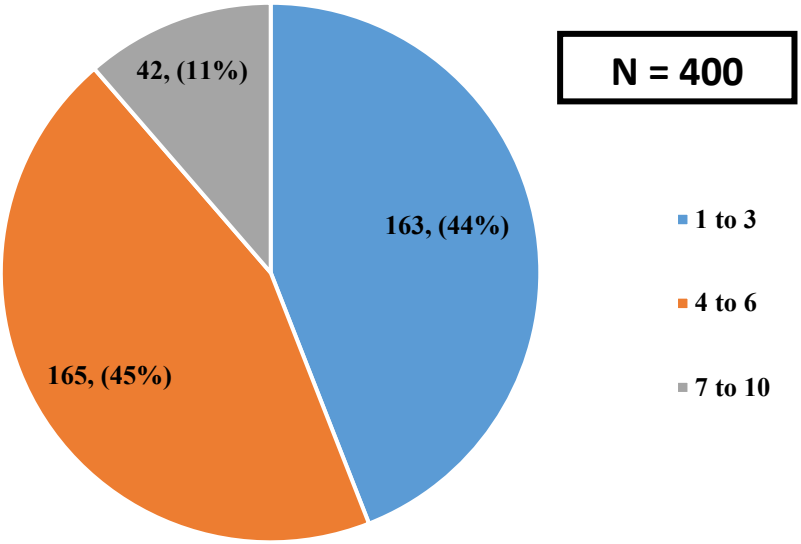
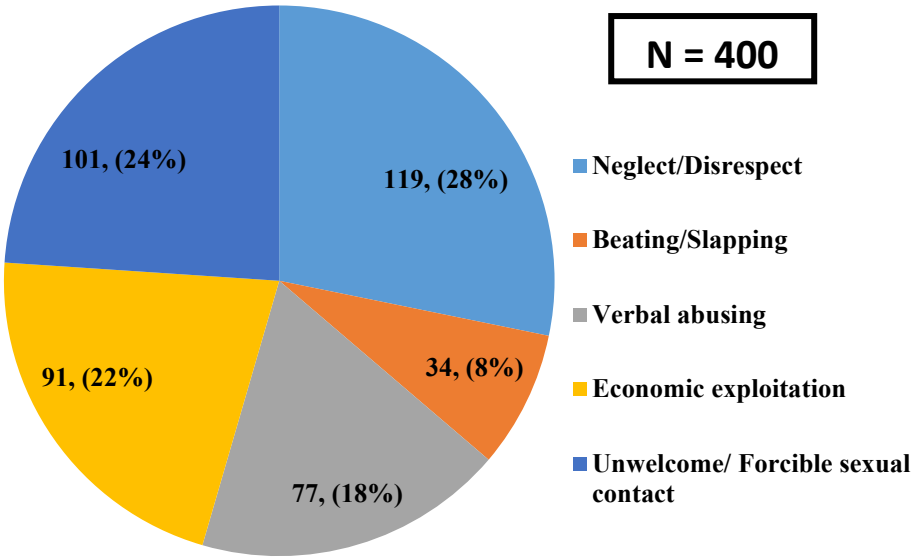


Table 18: Distribution of participants according to the perception about type of elder abuse most prevalent

Type of elder abuse	Yes		No		Don't Know		TOTAL	
	f	%	f	%	f	%	N	%
Neglect/Disrespect	119	29.8%	238	59.2%	43	10.7%	400	100%
Beating/Slapping	34	8.5%	323	80.35%				
Verbal abusing	77	19.3%	280	69.65%				
Economic exploitation	91	22.8%	266	66.17%				
Unwelcome/ Forcible sexual contact	3	0.8%	397	99.2%				

Lastly, in this section the participants were inquired about their perception on the type of elder abuse most prevalent. Maximum number of participants, i.e., 119 (29.8%) responded that it was neglect/disrespect, followed by economic exploitation (91, 22.8%), verbal abusing (77, 19.3%) and beating/slapping (34,8.5%). 3 (0.8%) participants responded that unwelcome/forcible sexual contact was most prevalent. 43 (10.7%) elderly responded as, "Don't Know".

Graph 18: Perception of participants about type of elder abuse most prevalent



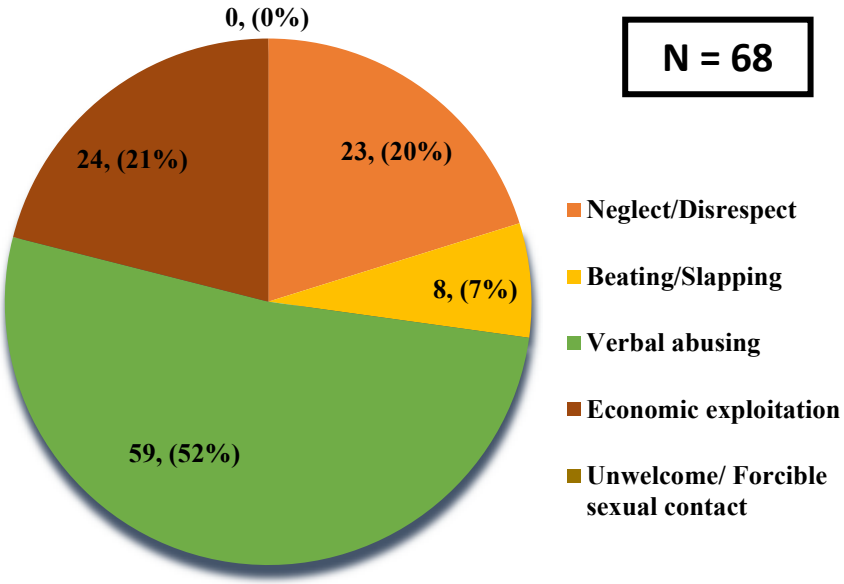
IV. Elder abuse experience of the study participants

Table 19: Distribution of participants according to the experience of elder abuse and its forms

Elder abuse prevalence	Physical abuse	Psychological abuse	Economic exploitation	Neglect	Sexual abuse	Total abuse prevalence
Number	8	59	24	23	0	68
Percentage	2%	14.6%	6%	5.7%	0%	16.9%
Total (N)	**400 (100%)**					

The Modified Geriatric Scale (MGS) was used to assess the experience of elder abuse among the participants. They were asked a set of questions pertaining to specific forms of elder abuse. If the participants answered "Yes" to any of the questions, it meant they were experiencing the corresponding type of elder abuse. It was found that out of 402 elderly participants, 68 (16.9%) were experiencing elder abuse in some form. Among all these cases, maximum number of them were facing psychological abuse (59, 14.6%), followed by economic exploitation (24, 6%), neglect (23, 5.7%) and physical abuse (8, 2%). None of the participants had experienced sexual abuse.

GRAPH 19: Distribution of participants according to the experience of elder abuse and its forms



V. Abuser profile

Table 20: Distribution of participants according to the duration of elder abuse experienced

Elder abuse duration in years	Number	Percentage
0 – 4	41	60.29%
≥ 5	27	39.7%
Non-responsive abuse cases	2	2.94%
Total	**68**	**100%**

The participants experiencing elder abuse were asked about its duration to which maximum number of them, i.e., 41 (60.29%) responded it to be 0 – 4 years, followed by 27 respondents who answered ≥ 5 years (39.7%). 2 participants (2.94%) accepted overall abuse but did not specify duration of experiencing the same.

GRAPH 20: Elder Abuse Duration

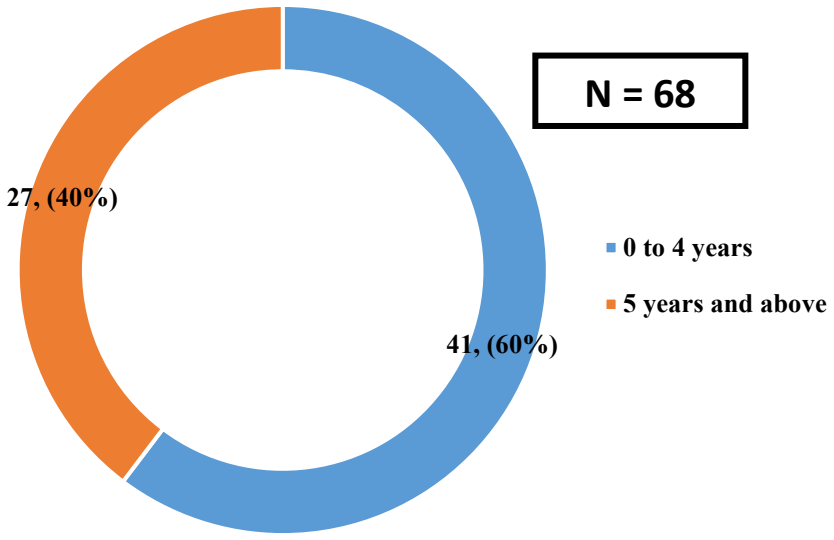


Table 21: Distribution of participants according to the frequency of elder abuse experienced

Abuse frequency		Neglect /Disrespect	Beating/Slapping	Verbally Abusing	Economic Exploitation	Total
ALMOST DAILY	**Number**	**32**	2	3	8	45
	%	**47.06%**	2.94%	4.41%	11.76%	66.17%
ONCE IN A WEEK	**Number**	15	**3**	5	2	25
	%	22.06%	**4.41%**	7.35%	2.94%	36.76%
ONCE IN A MONTH	**Number**	5	2	**6**	**15**	28
	%	7.35%	2.94%	**8.82%**	**22.06%**	41.17%
ONCE IN FEW MONTHS	**Number**	3	0	4	2	9
	%	4.41%	0	5.88%	2.94%	13.23%
NIL	**Number**	11	59	48	39	
	%	16.18%	86.76%	70.59%	57.35%	
No Response		2 (2.94%)				
Total abuse cases (N)		**68 (100%)**				

All 68 cases of elder abuse were questioned about the frequency of experiencing each type of abuse. It was found that 45 (66.17%) individuals experienced elder abuse almost daily, followed by 25 (36.76%) experiencing it once a week, 28 (41.17%) experiencing it once a month and 9 (13.23%) experienced it once in few months. Among the participants who faced abuse almost daily, 32 (47.06%) experienced neglect/disrespect followed by economic exploitation (8, 11.76%), verbal abuse (3, 4.4.1%) and beating/slapping (2, 2.94%). Among the participants who faced

abuse once in a week, 32 (47.06%) experienced neglect/disrespect followed by verbal abuse (5, 7.35%), beating/slapping (3, 4.41%) and economic exploitation (2, 2.94%). Among the participants who faced abuse once in a month, 15 (22.06%) experienced economic exploitation, followed by verbal abuse (6, 8.82%), neglect/disrespect (5, 7.35%) and beating/slapping (2, 2.94%). Among the participants who faced abuse once in few months, 4 (5.88%) experienced verbal abuse followed by neglect/disrespect (3, 4.41%) and economic exploitation (2, 2.94%). Two participants (2.94%) accepted overall abuse but did not specify frequency of the type of abuse.

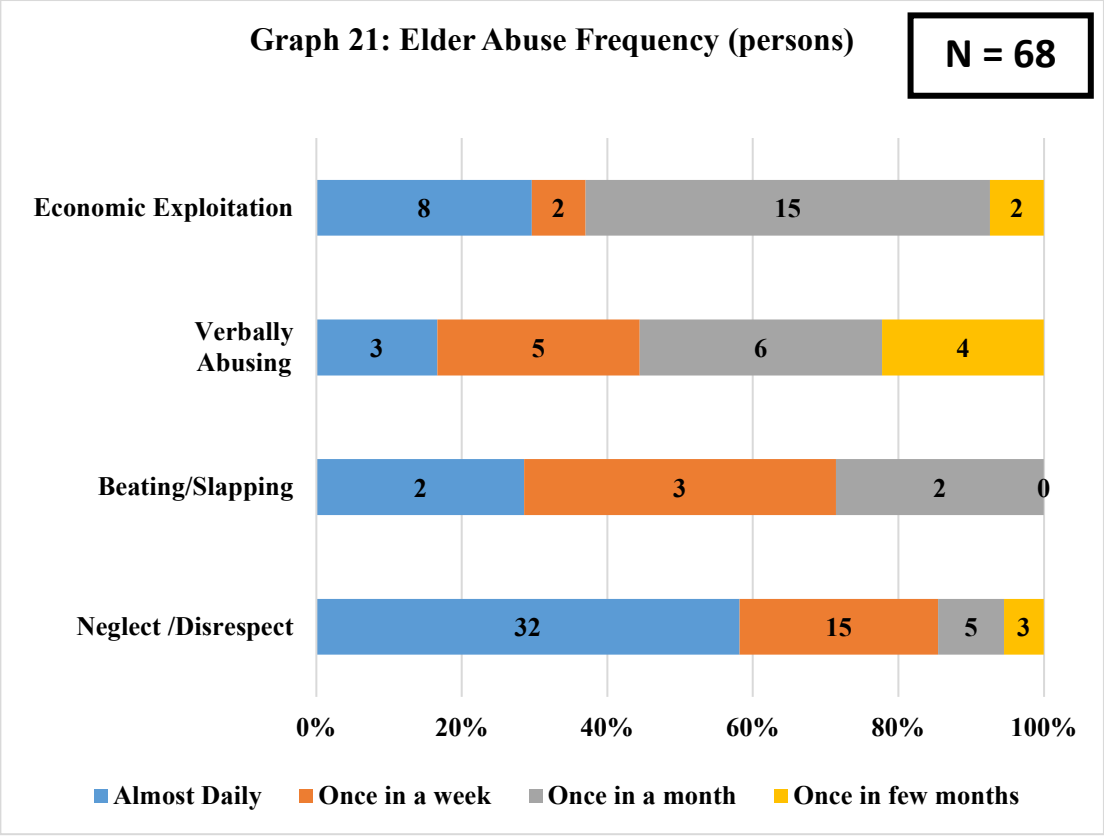
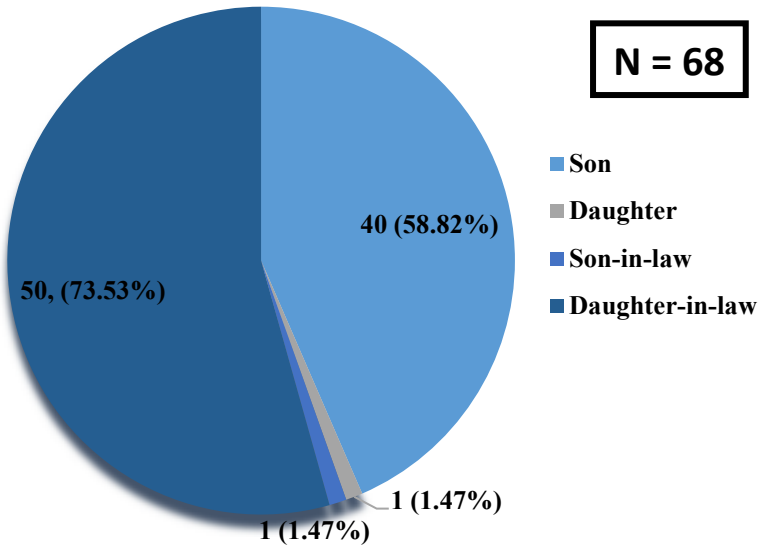


Table 22: Distribution of participants according to the person responsible for elder abuse (n=68).

Elder abuse perpetrator	Yes	%	No	%	No response	Total abuse cases
Son	40	58.82%	26	38.24%	2 (2.94%)	68 (100%)
Daughter	1	1.47%	65	95.59%		
Son-in-law	1	1.47%	65	95.59%		
Daughter-in-law	50	73.53%	16	23.53%		

When the elderly participants were asked about the person responsible for abusing them, maximum number of them (50, 73.53%) answered it was the 'daughter-in-law', followed by their 'son' (40, 58.82%) and one (1.47%) participant each answered it was their 'daughter' and 'son-in-law'. Two participants (2.94%) accepted overall abuse but did not specify the perpetrator responsible for the same.

Graph 22: Distribution of participants according to person responsible for elder abuse.



VI. Redressal Mechanisms for elder abuse

Table 23: Distribution of participants according to the attempt made by elders to report Elder Abuse

Elder abuse reported	Number	Percentage
Yes	19	27.9
No	49	72.1
Total Abuse cases	**68**	**100%**

Out of all 68 elderly participants who faced abuse in any form, only 19 (27.9%) made an attempt to report it and 49 (72.1%) did not report it.

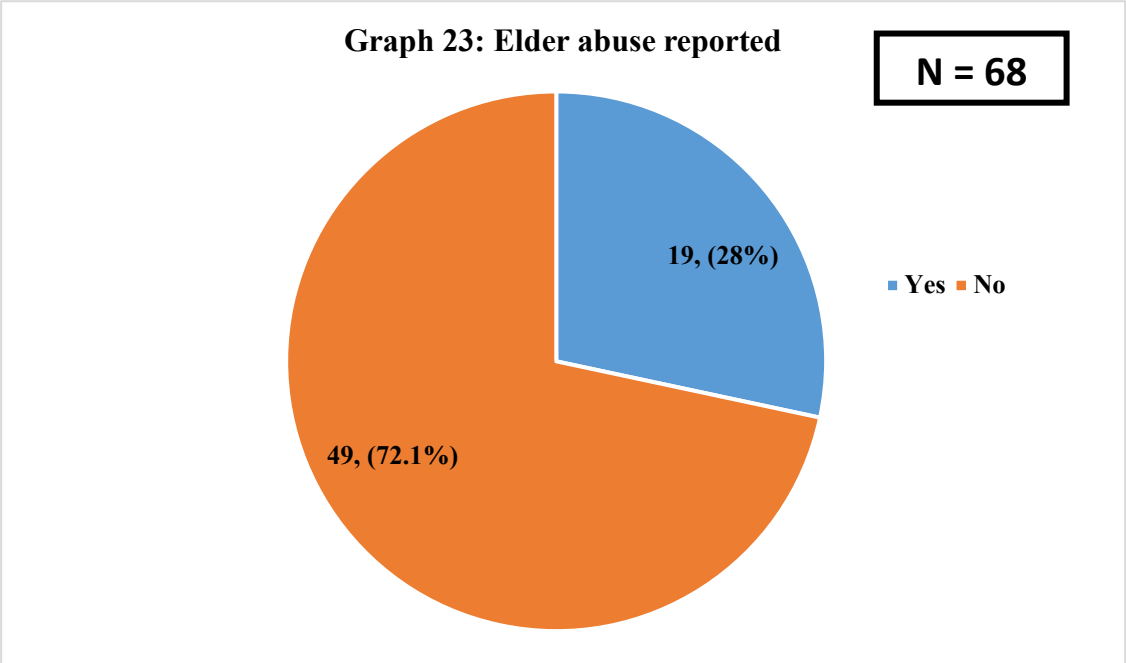


Table 24: Distribution of participants according to the person/agency elderly approached to report elder abuse

Person/agency elderly approached to report elder abuse	Yes	%	No	%	Not Reported	Total abuse Cases
Social Workers	1	1.47%	18	26.47%	49 (72%)	68 (100%)
Other family Members	7	10.29%	12	17.64%		
Relatives	11	16.17%	8	11.76%		
Friends	10	14.7%	9	13.23%		
Extended Family Members	1	1.47%	18	26.47%		

The participants who faced abuse and reported it were further asked about the person/agency they had approached to report it.11 (16.17%) answered that they had reported it to a 'relative', followed by a 'friend' (10, 14.7%), other family member (7, 10.29%), extended family member and social worker (1, 1.47%).

Graph 24: Distribution of participants according to the person/agency elderly approached to report elder abuse

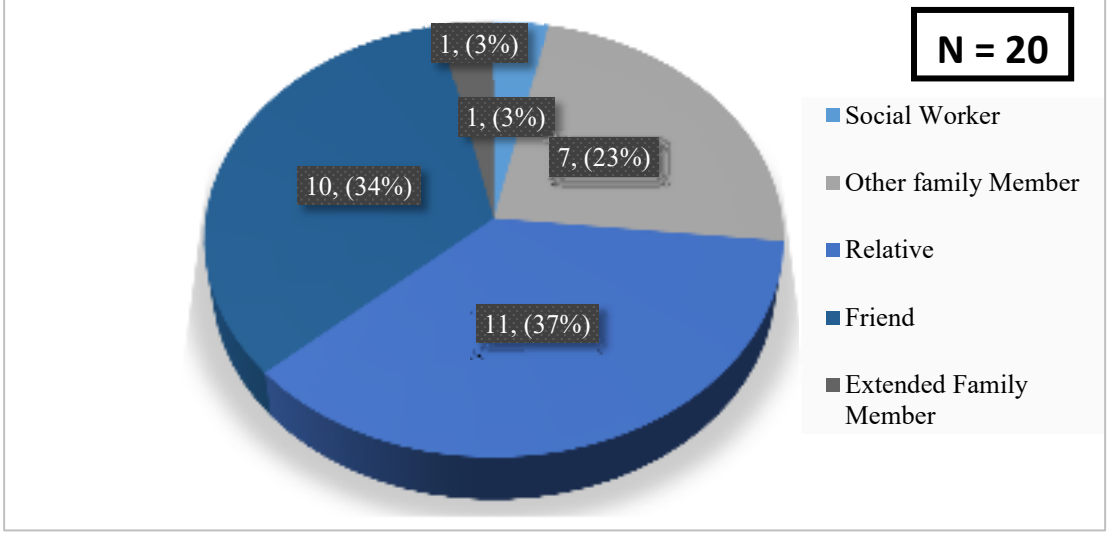


Table 25: Distribution of participants according to the reasons for approaching person/agency to report elder abuse

Reasons for approaching person/agency to report elder abuse	Yes	%	No	%	Not Reported	Total abuse Cases
Due to confidence in their ability to resolve the issue	13	19.11%	6	8.82%	49 (72%)	68 (100%)
Did not know how to deal with the problem	7	10.29%	12	17.64%		
To maintain confidentiality of the family matter	5	7.35%	14	20.58%		
Apparent Ineffectiveness of other methods	2	2.94%	17	25%		

The elderlies were further asked about the reasons for approaching person/agency to report elder abuse**,** to which 13 (19.11%) responded that it was "due to confidence in their ability to resolve the issue", followed by 7 (10.29%) who responded that they "did not know how to deal with the problem", 5 (7.35%) answered it was "to maintain confidentiality of the family matter", and 2 (2.94%) answered it was due to "apparent ineffectiveness of other methods".

Table 26: Distribution of participants according to the ways, person/agency had helped when elderly approached them to report elder abuse

How Person/agency helped elder abuse victims?	Yes		No		Not Reported	Total abuse Cases
	f	%	f	%		
Person / agency counseled my family	16	23.52%	3	4.41%	49 (72%)	68 (100%)
Person / agency counseled me	3	4.41%	16	23.52%		

The participants were also asked about the ways, person/agency had helped them, when approached to report elder abuse. 16 (23.52%) responded that the person / agency counseled their family and 3 (4.41%) responded that the person/agency counselled them.

Table 27: Distribution of participants according to the resolution of the issue of elder abuse after approaching any person/agency.

Issue resolved?	Number	Percentage
Yes	0	0
No	19	27.9%
Abuse cases not reported	49	72.1%
Total Abuse Cases	**68**	**100%**

All the 19 (27.9%) cases of elder abuse who reported it were asked if they received any resolution for their issue of elder abuse, for which all of them replied that they did not.

Table 28: Distribution of participants according to the reason for not reporting elder abuse

Reasons for not reporting elder abuse	Yes	%	No	%
Lacked Confidence in ability of any person/ agency to resolve problem	6	8.82%	43	63.23%
Did not know how to deal with problem	9	13.23%	40	58.82%
To maintain confidentiality of the family matter	26	38.23%	23	33.82%
Apparent ineffectiveness of existing portals of reporting and redress	4	5.88%	45	66.17%
Fear of Retaliation	18	26.47%	31	45.58%

The 49 elderly participants who experienced elder abuse were asked about the reasons for not reporting it. 26 (38.23%) answered it was "to maintain confidentiality of the family matter", 18 (26.47%) answered it was due to "fear of retaliation", 9 (13.23%) replied that they "did not know how to deal with problem", 6 (8.82%) answered that they "lacked confidence in ability of any person/ agency to resolve problem" and 4 (5.88%) answered that it was due to the "apparent ineffectiveness of existing portals of reporting and redress".

Table 29: Distribution of participants according to the opinion of the elderly for dealing with prevalent elder abuse effectively

Elderly opinion to deal effectively with Elder Abuse	Yes	%	No	%	Don't Know	Total abuse Cases
Increasing economic freedom of the abused	39	57.35%	26	38.23%	3 (4.41%)	68 (100%)
Developing effective legal reporting and redress system	23	33.82%	42	61.76%		
Developing effective social reporting and redress system	12	17.64%	53	77.94%		
Sensitizing children and strengthen inter-generational bonding	26	38.23%	39	57.35%		
Sensitizing Young Adults	48	70.58%	17	25%		
Developing Self Help Groups of Older Persons to provide assistance and Intervention	11	16.17%	54	79.41%		

All the 68 participants experiencing elder abuse were asked about their opinion for dealing with prevalent elder abuse effectively. 48 (70.58%) participants answered that elder abuse can be dealt by "sensitizing young adults", followed by 39 (57.35%) who answered it should be by "Increasing economic freedom of the abused", 26 (38.23%) answered it should be by 'sensitizing children and strengthening inter-generational bonding', 23 (33.82%) answered it should be by "developing effective legal reporting and redress system", 12 (17.64%) answered it should be by "developing effective social reporting and redress system" and 11 (16.17%) answered it should be by "developing self-help groups of older persons to provide assistance and intervention". Three (4.41%) participants answered they 'didn't know'.

Table 30: Distribution of participants according to the awareness about reporting and redressal mechanisms

Awareness about reporting and redressal mechanisms	Aware					Not Aware	Total abuse Cases
	Yes	%	No	%	Total		
Maintenance and Welfare of Parents and Senior Citizens Act 2007 (MWPSC Act)	5	7.35%	9	13.2%	14 (20.58%)	54 (79.41%)	68 (100%)
Tribunal Under the MWPSC Act	1	1.47%	13	19.11%			
Police Help Line	9	13.23%	5	7.35%			
Help Age India's Help Line	2	2.94%	12	17.64%			

When 68 participants experiencing abuse were asked about their awareness regarding reporting and redressal mechanisms, 53 (77.94%) participants answered they were not aware and 14 (20.58%) answered they were aware. Among the 14 participants, 9 (13.23%) were aware about 'police help line', 5 (7.35%) were aware about "Maintenance and Welfare of Parents and Senior Citizens Act 2007(MWPSC Act)", two (2.94%) were aware about 'Help Age India's help line', and one participant knew about the 'Tribunal under the MWPSC Act'.

Table 31: Distribution of participants according to the source of awareness about reporting and redressal mechanisms

Source of awareness of redressal	Aware					Not Aware	Total abuse Cases
	Yes	%	No	%	Total		
Television	3	4.41%	11	16.17%	14 (20.58%)	54 (79.41%)	68 (100%)
Family members	3	4.41%	11	16.17%			
Radio	2	2.94%	12	17.64%			
Friends/Neighbours	10	14.7%	4	5.88%			
Newspapers	4	5.88%	10	14.7%			
IEC material (poster/banner/etc.)	2	2.94%	12	17.64%			

The 14 participants were further asked to state the source of their awareness about reporting and redressal mechanisms. 10 (14.7%) answered it was their 'friends/neighbours', four (5.88%) answered it was 'newspaper', three (4.41%) answered it was 'television' and 'family' each and two (2.94%) answered it was 'radio' and 'IEC material' each.

Table 32: Distribution of participants according to whether benefits availed under MWPSC Act.

Benefits availed under MWPSC Act		Number	Percentage
Aware about MWPSC Act	Yes	0	0
	No	5	7.35%
Not aware about MWPSC Act		63	92.65%
Total		**68**	**100**

Out of 68 who were experiencing abuse, 5 (7.35%) participants were aware about MWPSC act. They were further asked if they had availed benefits under the MWPSC act, to which all of them replied 'no'.

Table 33: Distribution of participants according to whether any challenge faced while availing benefit under MWPSC Act

Whether challenges faced while availing benefit under MWPSC Act	Number	Percentage
Yes	3	4.41%
No	0	0
Don't know / Can't say	2	2.94%
Not aware about MWPSC Act	63	92.65%
Total	**68**	**100**

The five (7.35%) participants who were aware about the MWPSC act, but had never availed any benefits under it, were asked if they had faced any challenge while availing benefits. 3 (4.41%) answered 'yes' and 2 (2.94%) replied that they 'couldn't say'.

Table 34: Distribution of participants according to the challenges faced while availing benefit under MWPSC Act

Challenges faced while availing benefit under MWPSC Act	Yes	%	No	%	Not aware about MWPSC Act	Total abuse Cases
Lack of knowledge of service providers	3	4.41%	2	2.94%	63 (92.65%)	68 (100%)
Long waiting time for redressal of issue	1	1.47%	4	5.88%		
Lack of resources to fight case in court	2	2.94%	3	4.41%		
Don't Know / Can't Say	2	2.94%	3	4.41%		

The three (4.41%) participants who had faced any challenge while availing benefit under the MWPSC act, were further asked to mention them. All three (4.41%) answered it was the "lack of knowledge of service providers", followed by two (2.94%) who mentioned it to be "lack of resources to fight case in court" and one (1.47%) who answered it was 'long waiting time for redressal of issue'.

Only five (7.35%) participants were found to be aware of the MWPSC Act and none of them had availed any benefits under it. Hence, when they were asked about their 'perception of satisfaction with the resolution provided' or 'reasons for dissatisfaction with the resolution provided' or 'knowledge on how to avail benefits'

under MWPSC act, their responses were not applicable for these questions and were recorded as 'zero' out of five participants.

When five (7.35%) participants who were aware of the MWPSC act were asked about their perception of difficulty for availing benefits under MWPSC Act, three (4.41%) answered it was 'difficult', and when asked about their perception of affordability for availing benefits under MWPSC Act, two (1.47%) participants answered it was 'somewhat expensive', or 'expensive'. As they did not have knowledge on how to avail the benefits, none of them had availed any benefits. When asked about their perception that whether MWPSC Act provides for their welfare and social protection, they all agreed and answered 'yes' (7.35%).

ASSOCIATION TABLES

Table 35: Association between the sociodemographic profile of participants and their perception on what amounts to elder abuse the most

Socio-demographic Characteristics	Neglect (N = 36)			
Age (years)	**n**	**%**	**χ2**	**p- value**
60 – 69 years	26	72.2%	8.12	0.01
≥ 70 years	10	27.8%		
Category	**n**	**%**	**χ2**	**p-value**
Unreserved	10	27.8%	6.26	0.04
Reserved	26	72.2%		
Socio-demographic Characteristics	**Physical Abuse (N = 127)**			
Age (years)	**n**	**%**	**χ2**	**p-value**
60 – 69 years	80	63.0%	8.10	0.01
≥ 70 years	47	37.0%		
Socio-demographic Characteristics	**Verbal Abuse (N = 61)**			
Category	**n**	**%**	**χ2**	**p-value**
Unreserved	9	14.8%	7.02	0.03
Reserved	52	85.2%		
Socio-demographic Characteristics	**Economical Exploitation (N = 42)**			
Age (years)	**N**	**%**	**χ2**	**p-value**
60 – 69 years	30	71.4%	8.06	0.01
≥ 70 years	12	28.6%		

Socio-demographic Characteristics	Sexual Exploitation (N = 101)			
Age (years)	**N**	**%**	**χ2**	**p-value**
60 – 69 years	73	72.3%	9.92	0.007
≥ 70 years	28	27.7%		
Marital Status	**N**	**%**	**χ2**	**p-value**
Married	73	72.3%	5.90	0.05
Single/Widowed	28	27.7%		

To find out if there is any association between the sociodemographic profile of the study participants and their perception on what amounts to elder abuse the most, chi square test was performed. The test results showed that the participants belonging to 60 – 69 years age group and reserved category perceived 'neglect' as elder abuse the most. This association was found to be statistically significant (p=0.01, p=0.04). Statistically significant association was also found between elderly in the age group 60 – 69 years age group and the perception that 'physical abuse' amounts to elder abuse the most (0.01). The association between participants belonging to reserved category and the perception that 'verbal abuse' amounts to elder abuse the most was also found to be statistically significant (p=0.03). The perception of the participants belonging to 60 – 69 years age group that 'economical exploitation' amounts to elder abuse the most was also found to have statistically significant association (p=0.01). Lastly, elderly who perceived that 'sexual abuse' amounts to elder abuse the most were found to have significant association when they belonged to 60 – 69 years age group and were married (p=0.007, p=0.05). There was no significant statistical association found with other socio-demographic characteristics.

Table 36: Association between the socio-demographic profile of participants and their perception about prevalence of elder abuse.

Socio-demographic Characteristics	Perception about prevalence of elder abuse in any form (N = 339)			
Age (years)	**n**	**%**	**χ^2**	**p- value**
60 – 69	223	65.8%	4.46	0.107
≥ 70	116	34.2%		
Gender	**n**	**%**	**χ^2**	**p-value**
Male	125	36.9%	0.70	0.704
Female	214	63.1%		
Marital Status	**n**	**%**	**χ^2**	**p-value**
Married	221	65.2%	5.28	0.071
Single/Widowed	118	34.8%		
Religion	**n**	**%**	**χ^2**	**p-value**
Hindu	297	87.6%	4.33	0.114
Muslim/Christian	42	12.4%		
Category	**n**	**%**	**χ^2**	**p-value**
Unreserved	75	22.1%	0.54	0.763
Reserved	264	77.9%		
Family type	**n**	**%**	**χ^2**	**p-value**
Nuclear	74	85.1%	1.50	0.470
Joint	265	84.7%		
Family members	**n**	**%**	**χ^2**	**p-value**
1-5	152	44.8%	0.91	0.634
≥6	187	55.2%		

Living arrangements	**n**	**%**	**χ2**	**p-value**
With family/spouse	322	85.2%	3.13	0.208
With relative /any other/alone	17	77.3%		
Education status	**n**	**%**	**χ2**	**p-value**
Illiterate	212	62.5%	4.45	0.108
Literate	127	37.5%		
Occupation	**n**	**%**	**χ2**	**p-value**
Employed	86	25.4%	7.63	0.022
Unemployed/ Retired/ Homemaker	253	74.6%		
House ownership	**n**	**%**	**χ2**	**p-value**
Self-owned	193	56.9%	11.98	0.002
Owned by spouse /others /rented	146	43.1%		
Socioeconomic Status	**n**	**%**	**χ2**	**p-value**
High (Class I, II and III)	102	30.1%	3.49	0.175
Low (Class IV and V)	237	69.9%		

When asked about the perception of prevalence of elder abuse, out of 400 participants, 339 (84.75%) responded that it was prevalent and 33 (8.25%) responded that it was not. Assessment for the association between the socio-demographic profile of the study participants and their perception about prevalence of elder abuse was also done with the help of chi-square test. Significant statistical association was found when the elderly was 'unemployed/ retired/homemaker' or 'owned' their house and perceived that elder abuse is prevalent in the society (p=0.02, p=0.002).

Table 37: Association between the sociodemographic profile of participants and their perception on which type of elder abuse is the most prevalent.

Socio-demographic Characteristics	Neglect (N = 119)			
Marital Status	**n**	**%**	**χ2**	**p-value**
Married	88	73.9%	8.40	0.015
Single/Widowed	31	26.1%		
Socioeconomic Status	**n**	**%**	**χ2**	**p-value**
High (Class I, II and III)	42	35.3%	7.23	0.027
Low (Class IV and V)	77	64.7%		
Socio-demographic Characteristics	**Physical Abuse (N = 34)**			
Socioeconomic Status	**n**	**%**	**χ2**	**p-value**
High (Class I, II and III)	8	23.5%	5.83	0.05
Low (Class IV and V)	26	76.5%		
Socio-demographic Characteristics	**Verbal Abuse (N = 77)**			
Marital Status	**n**	**%**	**χ2**	**p-value**
Married	42	54.5%	6.82	0.03
Single/Widowed	35	45.5%		
Socioeconomic Status	**n**	**%**	**χ2**	**p-value**
High (Class I, II and III)	19	24.7%	6.50	0.04
Low (Class IV and V)	58	75.3%		

To see if there's association between the socio-demographic profile of the study participants and their perception regarding the type of elder abuse most prevalent, chi-square test was performed. The results showed that the association

between elderly who were married or belonged to lower socio-economic status and perceived that 'neglect' is the most prevalent, was statistically significant (p=0.015, p=0.027). With respect to 'physical abuse', the association of the elderly belonging to lower socio-economic status and perceiving physical abuse to be the most prevalent was also found to be statistically significant (p=0.05). The participants who were married and belonged to lower socio-economic status and perceived that 'verbal abuse' is most prevalent, were found to have statistically significant association (p=0.03, p=0.04).

Table 38: Association between the sociodemographic profile of participants and their experience of elder abuse and its forms.

Socio-demographic Characteristics	Neglect (N=23)			
Marriage	**n**	**%**	**χ2**	**p-value**
Married	8	34.8%	3.87	0.04
Single/Widowed	15	65.2%		
Socio-demographic Characteristics	**Economic exploitation (N=24)**			
Gender	**n**	**%**	**χ2**	**p-value**
Male	11	45.8%	4.81	0.02
Female	13	54.2%		

Statistically significant association was found between the participants who were single/widowed and had experienced neglect (p=0.04), and also between female elderly participants who had experienced economical exploitation (p=0.02).

Table 39: Binary logistic regression analysis between the sociodemographic profile of participants and their experience of elder abuse and its forms.

Socio-demographic Characteristics		Physical Abuse (N=8)		
		OR	**C.I. (95%)**	**p-value**
Marital Status	Single/Widowed	0.02	0.001 – 0.781	0.03
	Married	Ref	-	-
Socio-demographic Characteristics		**Psychological Abuse (N=59)**		
		OR	**C.I. (95%)**	**p-value**
Occupation	Unemployed/ Retired/ Homemaker	0.07	0.0 – 0.923	0.04
	Employed	Ref	-	-
Socio-demographic Characteristics		**Neglect (N=23)**		
		OR	**C.I. (95%)**	**p-value**
Category	Reserved	5.92	1.234 – 28.412	0.02
	Unreserved	Ref	-	-
Socio-demographic Characteristics		**Economical Exploitation (N=24)**		
		OR	**C.I. (95%)**	**p-value**
Gender	Female	6.43	1.240 – 33.388	0.02
	Male	Ref	-	-
Socioeconomic Status	Low (Class IV and V)	0.11	0.018 – 0.770	0.02
	High (Class I, II and III)	Ref	-	-

Binary logistic regression analysis was done to check the strength of association between the sociodemographic profile of the study participants and their experience of elder abuse and its forms. Results showed that single/widowed

compared to married elderly participants were 0.02 times (95% C.I. 0.001 – 0.0781, p=0.03) likely to experience physical abuse than not to experience it. Unemployed elderly participants compared to employed participants were 0.07 times (95% C.I. 0.0 – 0.923, p=0.04) likely to experience psychological abuse than not to experience it. Elderly participants belonging to reserved category compared to participants belonging to general category were 5.92 times (95% C.I. 1.234 – 28.412, p=0.02) more likely to experience neglect than not to experience it. Female elderly participants compared to male participants were 6.43 times (95% C.I. 1.240 – 33.388, p=0.02) more likely to experience economical exploitation than not to experience it, and elderly participants belonging to lower socioeconomic status compared to participants belonging to higher socio-economic status were 0.11 times (95% C.I. 0.018 – 0.770, p=0.02) likely to experience economical exploitation than not to experience it.

Table 40: Association between the sociodemographic profile of participants and elder abuse duration.

Socio-demographic Characteristics		Elder Abuse Duration (0 – 4 years) (N = 41)		Elder Abuse Duration (≥5 years) (N = 27)		χ^2	p-value
Age in years	**N**	**n**	**%**	**N**	**%**		
60 – 69	29	24	58.5%	5	20%	9.36	0.002
≥ 70	37	17	41.5%	20	80%		
Marital status	**N**	**n**	**%**	**N**	**%**		
Married	35	26	63.4%	9	36%	4.68	0.03
Single/Widowed	31	15	36.6%	16	64%		

Association between the sociodemographic profile of the study participants and the duration for which they have experienced elder abuse was assessed by using chi-square test. Results showed that the association between the elderly participants belonging to 60 – 69 years age group and who had experienced elder abuse for 0 – 4 years was found to be statistically significant, and elderly participants belonging to ≥ 70 years age group were found to have statistically significant association for experiencing elder abuse for ≥5 years (p=0.002). The association between married elderly participants and experiencing elder abuse for 0 – 4 years was found to be statistically significant, and single/widowed elderly participants were found to have statistically significant association for experiencing elder abuse for ≥5 years (p=0.03).

Table 41: Binary logistic regression analysis between the sociodemographic profile of participants and elder abuse duration.

Socio-demographic Characteristics		Elder Abuse Duration		
		OR	**C.I. (95%)**	**p-value**
Age	≥ 70 years	4.77	1.054 – 21.605	0.04
	60 - 69 years	Ref	-	-

Binary logistic regression analysis between the sociodemographic profile of the study participants and elder abuse duration showed that elderly participants belonging to age group ≥ 70 years were 4.77 times more likely (95% C.I. 1.054 – 21.605, p=0.04) to experience elder abuse for 0 – 4 years than ≥5 years.

Table 42: Association between the sociodemographic profile of participants and the abuser profile.

Socio-demographic Characteristics	Son (N=40)			
House Ownership	**n**	**%**	**χ2**	**p-value**
Self-owned	22	55%	3.73	0.05
Owned by spouse /others /rented	18	45%		
Socio-demographic Characteristics	**Daughter – in – law (N=50)**			
Occupation	**n**	**%**	**χ2**	**p-value**
Employed	9	18%	4.37	0.03
Unemployed/ Retired/ Homemaker	41	82%		

To assess the association between the sociodemographic profile of the study participants and the abuser profile, chi-square test was performed. The results showed statistically significant association present between elderly participants who owned their house and had experienced any form of abuse by their son (p =0.05), and also between elderly participants who were unemployed/retired/homemaker and had experienced any form of abuse by their daughter – in – law (p =0.03).

Table 43: Binary logistic regression analysis between the sociodemographic profile of participants and abuser profile.

Socio-demographic Characteristics		Abuser profile – Son		
		OR	**C.I. (95%)**	**p-value**
House ownership	Owned by self	4.21	1.123 – 15.834	0.03
	Owned by spouse /others /rented	Ref	-	-

Binary logistic regression analysis between the sociodemographic profile of the study participants and abuser profile showed that elderly participants who owned their house compared to those participants whose houses were owned by spouse /others /rented, were 4.21 times (95% C.I. 1.123 – 15.834, p=0.03) more likely to experience abuse by their son than not to experience it.

Table 44: Association between the sociodemographic profile of participants and the cases of elder abuse reported.

Socio-demographic Characteristics	Elder abuse reported (N = 19)			
Age (years)	**N**	**%**	**χ2**	**p- value**
60 – 69	4	21.1%	6.03	0.01
≥ 70	15	78.9%		
Marital Status	**N**	**%**	**χ2**	**p-value**
Married	6	31.6%	4.53	0.03
Single/Widowed	13	68.4%		
Family type	**N**	**%**	**χ2**	**p-value**
Nuclear	9	47.4%	3.88	0.04
Joint	10	52.6%		
Family members	**N**	**%**	**χ2**	**p-value**
1-5	15	73.7%	5.58	0.01
≥6	5	26.3%		
Living arrangements	**N**	**%**	**χ2**	**p-value**
With family/spouse	13	68.4%	7.51	0.01
With relative /any other/alone	6	31.6%		

Chi-square test was performed to assess the association between the sociodemographic profile of the study participants and the reporting of elder abuse cases. Statistically significant association was found with socio-demographic characteristics such as elderly who were ≥ 70 years old (p=0.01), single/widowed (p=0.03), staying in joint type of family (p=0.04), having 1 – 5 family members (p=0.01) and living with family/spouse (p=0.01), with reporting of abuse among cases.

Table 45: Binary logistic regression analysis between the sociodemographic profile of participants and the cases of elder abuse reported

Socio-demographic Characteristics		Elder Abuse reported (N=19)		
		OR	**C.I. (95%)**	**p-value**
Age	≥ 70 years	12.23	1.433 – 104.461	0.02
	60 – 69 years	Ref	-	-
Education	Illiterate	30.72	2.059 – 458.665	0.01
	Literate	Ref	-	-

Binary logistic regression analysis between the sociodemographic profile of the study participants and the cases of elder abuse reported showed that elderly participants belonging to ≥ 70 years age group compared to elderly in 60 – 69 years age group were 12.23 times (95% C.I. 1.433 – 104.461, p=0.02) more likely to report abuse, and elderly participants who were illiterate compared to literate participants were 30.72 times (95% C.I. 2.059 – 458.665, p=0.01) more likely to report abuse than not report it.

DISCUSSION

The present study was conducted to find out the prevalence of elder abuse and its awareness among the elderly population. The 400 participants were interviewed and asked questions about their experience of facing abuse and the perpetrators of abuse. The study also attempted to understand whether the victims of elder abuse approached anyone to sought any redressal, and if not, the reasons for the same. This study was undertaken in the rural field practice areas of PHC Vantamuri (rural) in Belagavi taluka of Belagavi district of Karnataka among 400 elderly (≥60 years) population.

I. Socio-demographic profile of the study participants

Table Nos. 1 to 13: Distribution of participants according to socio-demographic profile of the study participants

In the present study, out of 400 study participants, 255 (63.7%) elderly belonged to the age group of 60 – 69 years. The mean age of the study subject was 68.18 ± 7.12 years with a range of 60 – 91 years and median age was 66.0 years. Among the study participants, it was noted that 252 (63%) elderly were females and 148 (37%) elderly were males. Among 400 participants, 255 (63.7%) were married, 144 (36%) were widowed and one (0.3%) was single. None of the participants were divorced or separated. Out of the total subjects studied, majority 350 (87.5%) followed Hinduism, 46 (11.5%) were Muslim and four (1%) participants followed Christianity. Out of 400 elderly participants, 158 (39.5%) belonged to OBC category, followed by 126 (31.5%) from ST category, 91 (22.75%) belonged to general category and 25 (6.25%) were from SC category.

Among the 400 elderly subjects, most of them were living in a joint family (313, 78.25%), followed by 87 (21.75%) living in a nuclear family. Among the 400 elderly subjects, most of them were having six to ten family members (209, 52.25%), 176 participants had up to five family members (44%), followed by 11 participants (2.75%) who had eleven to fifteen family members and four participants (1%) who had sixteen to twenty family members.

Out of all the participants studied, 354 (88.5%) lived with their families, followed by 24 elderly who lived only with their spouse (6%), 17 elderly who lived alone (4.3%), 5 subjects lived with a relative and any other person (1.25%).

Literacy status of the study participants revealed that 255 (63.7%) and 145 (36.25%) were illiterates and literates respectively. In a report 'Elderly in India, 2016' given by Ministry of Statistics and Programme Implementation, Government of India, the literacy rate among elderly persons in rural areas had been shown to be 34.2% with 65.8% illiterates.[5]

Among the 400 study participants, it was observed that 201 (50.2%) were unemployed/retired, 114 (28.5%) were employed and 87 (21.8%) were homemakers.

According to the study participant's house ownership status, it was noted that 239 (59.75%) elderly owned their house, whereas 83 (20.75%) lived in a house owned by their spouse, 62(15.5%) lived in a house owned by others and 16 (4%) reported to be living in a rented house.

Among the 400 study subjects, 141 (35.25%) belonged to Class V, 140 (35%) to Class IV, 71 (17.75%) to Class III, 32 (8%) to Class II and 10 (2.5%)

belonged to Class I socioeconomic status according to Modified B.G. Prasad's Classification.

II. General health of the study participants

Table No. 14: Distribution of participants according to the general health status

When the elderly participants were asked about their health status, it was noted that the leading comorbidities among elderly were hypertension (161, 40.3%), joint pain (152, 38%), diabetes (100, 25%), hearing defect/loss (40, 10%), vision defect/loss and oro-dental caries each (29, 7.2%), and 30 (7.5%) elderly reported other health problems such as malnutrition/obesity, congestive heart disease, stroke/paralysis, renal failure/chronic kidney disease etc. Similar prevalence of health conditions was found in a study conducted in Delhi in 2018.[45] Even above 60 years of age, 94 (23.5%) participants did not have any comorbidity. Most of the participants had one (145, 36.3%) or two (102, 25.5%) co-morbidities.

III. Elder abuse knowledge and perception of the study participants

Table Nos. 15 – 18: Distribution of participants according to the awareness of elder abuse and perception of its prevalence

When asked about elderly's perception on what amounts to elder abuse the most, 127 (31.59%) responded that it was beating/slapping, followed by unwelcome/forcible sexual contact (10, 25.3%), verbal abusing (6,15.17%), economic exploitation (42, 10.45%) and neglect/disrespect (36, 8.96%). But in the 'Elder Abuse Study – 2018' conducted in India with a sample size of 5,014 elders,

most of them responded that disrespect (51%), verbal abuse (42%) and neglect (32%) amount most to the abuse.[6]

Out of 400 elderly participants who were asked about their perception on prevalence of elder abuse in any form, 339 (84.75%) responded that it is prevalent and 33 (8.25%) responded that it is not, whereas in the 'Elder Abuse study – 2018' conducted in India with a sample size of 5,014 elders, 60% elders agreed that elder abuse is prevalent in society.[6]

The elderly participants were also asked about their perception on the prevalence of elder abuse out of 10 houses. 165 (45%) perceived the prevalence to be 1 – 3 out of 10 houses, 163 (44%) perceived the prevalence to be 4 – 6 out of 10 houses and 41 (11%) perceived the prevalence to be 7 – 10 out of 10 houses.

Lastly, in this section the participants were inquired about their perception on the type of elder abuse most prevalent. Maximum number of participants, i.e., 119 (29.8%) responded that it was neglect/disrespect, followed by economic exploitation (91, 22.8%), verbal abusing (77, 19.3%) and beating/slapping (34,8.5%). Three (0.8%) participants responded that unwelcome/forcible sexual contact was most prevalent. Similar kind of results were found in the 'Elder Abuse study – 2018' conducted in India with a sample size of 5,014 elders, where leading answers were verbal abuse and disrespect, followed by neglect, economic exploitation and beating/slapping. Unwelcome or forcible sexual contact were perceived by least number of elderly.[6]

IV. Elder abuse experience of the study participants

Table No. 19: Distribution of participants according to their experience of elder abuse and its types

Among the 400 elderly participants, the overall prevalence of elder abuse was found to be **68 (17%)**. Among all these cases, maximum number of them were facing psychological abuse (59, 52%), followed by economic exploitation (24, 21%), neglect (23, 20%) and physical abuse (8, 7%). None of the participants had experienced sexual abuse. In the 'Elder Abuse study – 2018', 25% elders had stated that they had experienced elder abuse. The findings also showed that the most common form of elder abuse prevalent was disrespect and verbal abuse (50%) followed by neglect (34%), economic exploitation (22%) and beating/slapping (12%). 1% elderly had stated that they were victims of sexual abuse.[6] A study conducted in Maharashtra in 2016, used data from the 'BKPAI' survey with a sample size of 1,435 elders, and showed the prevalence of elder abuse around 35%.[38] Another study conducted in Mumbai in 2018 used data from 'BKPAI' survey with a sample size of 9,850 elders, and found that the prevalence of elder abuse was 10%.[33] A cross-sectional study conducted among 243 elderly in rural Puducherry in 2019 found the prevalence of elder abuse to be 50.2%.[39] The variation with respect to elder abuse prevalence could have been due to differences in the level of awareness and knowledge about elder abuse. Compared to studies conducted in India, a survey conducted in Ireland among community dwelling people aged 65 years or more showed the prevalence of overall abuse and neglect of only 2.2%.[18] The Malaysian Elder Mistreatment Project (MAESTRO), a population-based survey conducted in 2017 among 4,118 elderly in Malaysia, also

showed the prevalence elder abuse of 4.5%.[21] Similar results have been found in other studies conducted to find the prevalence of elder abuse that showed that the most common forms of abuse prevalent were verbal abuse, disrespect and neglect.[46][47][30][35][40]

V. Abuser profile

Table Nos. 20 – 22: Distribution of participants according to the duration and frequency of elder abuse experienced and abuser profile.

The 68 participants experiencing elder abuse were asked about its duration to which maximum number of them, i.e., 41 (62%) responded it to be 0 – 4 years, followed by 22 (38%) who responded it to be 5 years and beyond. The mean duration of abuse years was around 4 years (Mean = 3.9 ± 2.6 years). Similar results were found in the national level study conducted in India by 'Help Age India' NGO in 2018 among 5014 elderly.[6]

All 68 cases of elder abuse were questioned about the frequency of experiencing each type of abuse. It was found that 45 (66.17%) individuals experienced elder abuse almost daily, followed by 25 (36.76%) experiencing it once a week, 28 (41.17%) experiencing it once a month and 9 (13.23%) experienced it once in few months. The type of abuse which is most frequent and occurs almost daily is neglect/disrespect (32,47.06%) followed by economic exploitation (8, 11.76%), verbal abuse (3, 4.4.1%) and beating/slapping (2, 2.94%). Among the participants who faced abuse once in few months, four (5.88%) had experienced verbal abuse followed by neglect/disrespect (3, 4.41%) and economic exploitation (2, 2.94%). The 'Elder Abuse study – 2018' conducted in India among 5014 elderly also found similar results at the national level survey.[6]

When the elderly participants were asked about the person responsible for abusing them, maximum number of them (50, 73.53%) answered it was the 'daughter-in-law', followed by their 'son' (40, 58.82%) and only one (1.47%) participant each answered it was both their 'daughter' and 'son-in-law'. Similar results have been found in previous studies conducted in India and even outside India, where the main abusers were "son" and "daughter-in-law".[6][34][38][18]

VI. Redressal Mechanisms

Table Nos. 23 – 27: Distribution of participants according to the reporting of 'Elder Abuse' by approaching some person/agency and whether they received resolution

Out of all 68 elderly participants who faced abuse in any form, only 19 (27.9%) made an attempt to report it. This percentage of reporting abuse was found to be lesser (15-18%) in other studies.[28][6] 11 (16.17%) answered that they had reported it to a 'relative', followed by a 'friend' (10, 14.7%), other family member (7, 10.29%), extended family member and social worker (1, 1.47%). In previous studies also it has been found that the victims of elder abuse had approached relative, friend or police for reporting abuse.[28][6] 13(19.11%) responded that it was "due to confidence in their ability to resolve the issue", that they approached them for help. 7 (10.29%) participants answered that they "did not know how to deal with the problem". Similar reasons for reporting abuse were found in the 'Elder Abuse study – 2018'.[6] 16 (23.52%) responded that the person / agency who they had approached for reporting abuse counseled their family. In contrast to the 'Elder Abuse Study – 2018' conducted in India among 5014 elderly, where 35% of the reported were resolved, none of the participants in this study got resolution for their issue of abuse.[6]

Poor rates of resolution of cases of elder abuse in this study could have been due to lack of awareness regarding redressal mechanisms.

Table No. 28: Distribution of participants according to the 'reason for not reporting elder abuse'.

The 48 elderly participants who experienced elder abuse were asked about the reasons for not reporting it. 25 (36.76%) answered it was "to maintain confidentiality of the family matter", 18 (26.47%) answered it was due to "fear of retaliation", 9 (13.23%) replied that they "did not know how to deal with problem", 6(8.82%) answered that they "lacked Confidence in ability of any person/ agency to resolve problem" and 4 (5.88%) answered that it was due to the "apparent ineffectiveness of existing portals of reporting and redress". Even in the 'Elder Abuse study – 2018' conducted in India among 5014 elderly, the leading reason for not reporting abuse was 'to maintain confidentiality of the family matter' in 52% cases.[6]

Table No. 29: Distribution of participants according to the opinion of the elderly for dealing with prevalent elder abuse effectively

All the 68 participants experiencing elder abuse were asked about their opinion for dealing with prevalent elder abuse effectively. 48 (70.58%) participants answered that elder abuse can be dealt by 'sensitizing young adults', followed by 39 (57.35%) who answered it should be by "increasing economic freedom of the abused", 26 (38.23%) answered it should be by "sensitizing children and strengthening inter-generational bonding", 23 (33.82%) answered it should be by "developing effective legal reporting and redress system", 12 (17.64%) answered it should be by "developing effective social reporting and redress system" and 11

(16.17%) answered it should be by "developing self-help groups of older persons to provide assistance and intervention". The findings were similar to the national survey done by Help Age India conducted in India among 5014 elderly in 2018. [6]

Table Nos. 30 – 31: Distribution of participants according to the awareness about reporting and redressal mechanisms

When 68 participants experiencing abuse were asked about their awareness regarding reporting and redressal mechanisms, 53 (77.94%) participants answered they were not aware and 14 (20.58%) answered they were aware. Among the 14 participants, 9 (13.23%) were aware about 'police help line', 5 (7.35%) were aware about "Maintenance and Welfare of Parents and Senior Citizens Act 2007 (MWPSC Act)", two (2.94%) were aware about 'Help Age India's help line', and only one participant knew about the 'Tribunal under the MWPSC Act'. The percentage of awareness regarding reporting and redressal mechanisms was found to be lesser in this study compared to another national study where 41% of the victims were aware.[6]

The 14 participants were further asked to state the source of their awareness about reporting and redressal mechanisms. 10(14.7%) answered it was their 'friends/neighbour', 4 (5.88%) answered it was 'newspaper', 3 (4.41%) answered it was 'television' and 'family' each and 2 (2.94%) answered it was 'radio' and 'IEC material' each. But in the 'Elder Abuse study – 2018' conducted in India among 5014 elderly, the main sources reported by the elderly were television followed by newspaper, family/friends & neighbours.[6]

Table Nos. 32 – 34: Distribution of participants according to whether benefits availed/difficulty and challenges faced/ knowledge on how to avail benefits under MWPSC Act.

Five (7.35%) participants who said they were aware about MWPSC act, had not availed benefits under the MWPSC act. Three (4.41%) answered that they had faced challenges while availing benefits, most common being 'lack of knowledge of service providers' (3, 4.41%), followed by "lack of resources to fight case in court" (2, 2.94%) and 'long waiting time for redressal of issue' (1, 1.47%).

Even though 5 (7.35%) participants out of 68 had stated that they were about the MWPSC act, they did not have the knowledge on how to avail benefits under the act. Three (4.41%) answered it was 'difficult' to avail benefits under MWPSC Act and did not know about the affordability for the same but two (2.94%) participants perceived that it was 'somewhat expensive/expensive' to avail benefits under the act. All the five (7.35%) participants who were aware of the MWPSC act perceived that the "act provides social protection to elder people and meant for their welfare".

Table No. 35: Association between the sociodemographic profile of participants and their perception on what amounts to elder abuse the most

The Chi-square test results showed that the participants belonging to 60 – 69 years age group and reserved category perceived 'neglect' as elder abuse the most; This association was found to be statistically significant respectively ($p=0.01$& $p=0.04$). Statistically significant association was also found between elderly in the age group 60 – 69 years age group and the perception that 'physical abuse' amounts to elder abuse the most ($p=0.01$). The association between participants belonging to

reserved category and the perception that 'verbal abuse' amounts to elder abuse the most was also found to be statistically significant (p=0.03). The perception of the participants belonging to 60 – 69 years age group that 'economical exploitation' amounts to elder abuse the most was also found to have statistically significant association (p=0.01). Lastly, elderly who perceived that 'sexual abuse' amounts to elder abuse the most were found to have significant association when they belonged to 60 – 69 years age group and were married (p=0.007, p=0.05). Similar association was seen in the 'Elder Abuse study – 2018' where the elderly in the younger age group (60-69 years) and married participants had the same perceptions about elder abuse and its forms.[6]

Table No. 36: Association between the socio-demographic profile of participants and their perception about prevalence of elder abuse.

Significant statistical association was found when the elderly was 'unemployed/ retired/homemaker' or 'owned' their house and perceived that elder abuse is prevalent in the society (p=0.02, p=0.002). But in another national level survey conducted in 2018 in India, it was found that higher percentages of elderly participants whose house was owned by others/spouse or rented, had the perception that elder abuse is prevalent in the society. [6]

Table No. 37: Association between the sociodemographic profile of participants and their perception on which type of elder abuse is the most prevalent.

The results showed that the association between elderly who were married or belonged to lower socio-economic status and perceived that 'neglect' is the most prevalent, was statistically significant (p=0.01, p=0.02). With respect to 'physical abuse', the association of the elderly belonging to lower socio-economic status and

perceiving physical abuse to be the most prevalent was also found to be statistically significant (p=0.05). The participants who were married and belonged to lower socio-economic status and perceived that 'verbal abuse' is most prevalent, were found to have statistically significant association (p=0.03, p=0.04). In contrast to this study, the study conducted by Help Age India in 2018 showed that higher percentages of elderly participants who were single/widowed perceived different types of elder abuse to be most prevalent. [(6)]

Table Nos. 38 – 39: Association between the sociodemographic profile of participants and their experience of elder abuse and its forms

Statistically significant association was found between the participants who were single/widowed and had experienced neglect (p=0.04), and also between female elderly participants who had experienced economical exploitation (p=0.02). Similar associations were found in the 'Elder Abuse study – 2018'.[(6)]

Binary logistic regression analysis was done to check the strength of association between the sociodemographic profile of the study participants and their experience of elder abuse and its forms. Results showed that single/widowed compared to married elderly participants were 0.02 times (95% C.I. 0.001 – 0.0781, p=0.03) likely to experience physical abuse than not to experience it. Unemployed elderly participants compared to employed participants were 0.07 times (95% C.I. 0.0 – 0.923, p=0.04) likely to experience psychological abuse than not to experience it. These associations were found to be similar to the ones found in a study conducted in Nepal where single/widowed and unemployed participants were found more likely to experience neglect or psychological abuse compared to others.[(20)]

Elderly participants belonging to reserved category compared to participants belonging to general category were 5.92 times (95% C.I. 1.234 – 28.412, p=0.02) more likely to experience neglect than not to experience it. Female elderly participants compared to male participants were 6.43 times (95% C.I. 1.240 – 33.388, p=0.02) more likely to experience economical exploitation than not to experience it, and elderly participants belonging to lower socioeconomic status compared to participants belonging to higher socio-economic status were 0.12 times (95% C.I. 0.018 – 0.770, p=0.02) likely to experience economical exploitation than not to experience it. Similar results were seen in a study conducted in Maharashtra where statistically significant association was present between elderly belonging to reserved category and experiencing neglect, female elderly and elderly belonging to lower socio-economic status experiencing economic exploitation. [38]

Table Nos. 40 – 41: Association between the sociodemographic profile of participants and elder abuse duration.

Chi-square results showed that the association between the elderly participants belonging to 60 – 69 years age group and who had experienced elder abuse for 0 – 4 years was found to be statistically significant, and elderly participants belonging to ≥ 70 years age group were found to have statistically significant association for experiencing elder abuse for ≥5 years (p=0.002). The association between married elderly participants and experiencing elder abuse for 0 – 4 years was found to be statistically significant, and single/widowed elderly participants were found to have statistically significant association for experiencing elder abuse for ≥5 years (p=0.03).

Binary logistic regression analysis between the sociodemographic profile of the study participants and elder abuse duration showed that elderly participants

belonging to age group ≥ 70 years were 4.77 times more likely (95% C.I. 1.054 – 21.605, p=0.04) to experience elder abuse for 0 – 4 years than ≥5 years.

Table Nos. 42 – 43: Association between the sociodemographic profile of participants and the abuser profile.

Chi-square results showed statistically significant association present between elderly participants who owned their house and had experienced any form of abuse by their son (p=0.05), and also between elderly participants who were unemployed/retired/homemaker and had experienced any form of abuse by their daughter – in – law (p =0.03). The results from the "Elder Abuse study – 2018' also showed similar associations where higher percentages of elderly who owned their house had son as the perpetrator of abuse, as well as elderly who were unemployed/retired/homemaker had experienced abuse by their daughter – in – law. [(6)]

Binary logistic regression analysis between the sociodemographic profile of the study participants and abuser profile showed that elderly participants who owned their house compared to those participants whose houses were owned by spouse /others /rented, were 4.22 times (95% C.I. 1.123 – 15.834, p=0.03) more likely to experience abuse by their son than not to experience it.

Table Nos. 44 – 45: Association between the sociodemographic profile of participants and the cases of elder abuse reported.

Statistically significant association was found with socio-demographic characteristics such as elderly who were ≥ 70 years old (p=0.01), single/widowed (p=0.03), staying in joint type of family (p=0.04), having 0 – 5 family members

(p=0.01) and living with family/spouse (p=0.01). Similar statistically significant association of reported abuse was found with widowed elderly living in joint type of family in a study conducted in Saurashtra, India in 2018.[35]

Binary logistic regression analysis between the sociodemographic profile of the study participants and the cases of elder abuse reported showed that elderly participants belonging to ≥70 years age group compared to elderly in 60 – 69 years age group were 12.23 times (95% C.I. 1.433 – 104.461, p=0.02) more likely to report abuse, and elderly participants who were illiterate compared to literate participants were 30.72 times (95% C.I. 2.059 – 458.665, p=0.01) more likely to report abuse than not report it. Similar regression analysis was seen for illiteracy and abuse reported in a study conducted in Saurashtra, India in 2018.[35]

CONCLUSION

Elder Abuse being a sensitive issue is seldom discussed in the society. As the demography of our country is changing with increase in the number of elderly and their life expectancy, with increased urbanization and modernization, more and more elderly find themselves left alone and neglected. In some cases, verbal/physical abuse, dispute over property, and even sexual abuse is also seen. The situation is even more grim in rural India, where most of the elderly are illiterate and work as farmers in the fields. Old age can take a toll on their health, forcing them to stay at home, stop earning money and thus, become dependent on their family members for taking care of them. Some adult children may find it as a burden, resulting in disrespecting elders which might even take the form of elder abuse.

In this study, among the 400 elderly participants, most of the participants were aware of elder abuse and 339 (84.75%) perceived that it is prevalent in the society. The knowledge and awareness regarding elder abuse among the participants was found to be satisfactory and the socio-demographic determinants for the same included elderly belonging to 60 – 69 years age group, reserved category, married participants, unemployed/ retired/homemaker, lower socio-economic status and elderly who owned their house.

The prevalence of elder abuse was found to be low (17%) as compared to what was expected (35%). Among all these cases, maximum number of them were facing psychological abuse (59, 52%), followed by economic exploitation (24, 21%), neglect (23, 20%) and physical abuse (8, 7%). None of the participants had experienced sexual abuse. Common perpetrators of elder abuse were found to be

son (40, 58.82%) and daughter – in – law (50, 73.53%). Statistically significant association was present between the occurrence of abuse and socio-demographic characteristics such as single/widowed elderly, unemployed elderly participants, reserved category, female gender and lower socioeconomic status.

The percentage of victims who reported abuse was found to be very poor as only 19 (27.9%) out of 68 made an attempt to report it. Most of them had approached their relative, friend or a family member "due to confidence in their ability to resolve the issue" and because they "did not know how to deal with the problem". None of the participants in this study got resolution for their issue of abuse. The 48 elderly participants who experienced elder abuse but did not report it were asked about the reasons for the same, for which most of them answered it was "to maintain confidentiality of the family matter" or due to "fear of retaliation" or they "did not know how to deal with problem".

The knowledge regarding reporting and redressal mechanisms was also found to be unsatisfactory as only 14 participants out of 68 victims were aware about 'police help line', or 'Maintenance and Welfare of Parents and Senior Citizens Act, 2007 (MWPSC Act)', or 'Help Age India's help line', or 'Tribunal under the MWPSC Act'. Just 5 (7.35%) participants were aware about MWPSC act, but had not availed any benefit under the MWPSC act.

The poor rates of reporting cases of abuse and poor awareness regarding redressal mechanisms for the same is a matter of grave concern. This wide gap of knowledge among the elderly (especially who are facing abuse) demands attention of the government and police authorities to take actions for increasing awareness among the elderly for various portals available to report elder abuse.

RECOMMENDATIONS

Individual Level

- Mandatory reporting of abuse to authorities (Toll-free Elderly help line number – 14567).

Family Level

- Training of caregivers for early Identification of elder abuse
- Sensitizing young adults and encouraging them to improve their interaction with elderly at homes.
- School-based intergenerational educational programmes.

PHC/Gram Panchayat Level

- Screening of potential victims and abusers at geriatric clinics/Primary Health Centre/Police stations.
- Psychological counseling/sensitization for abusers.

District/Taluka Level

- Community health talks/monthly awareness programmes should be conducted by police/NGOs/elderly self-help groups, and local politicians or senior police authorities can educate them on the issue of elder abuse and how the victims can report the issue.
- The redressal mechanisms should be strengthened to resolve elder abuse issues in an elder friendly manner.

State/Central level

- Provision of free legal aid, financial aid, and housing support by the Central and State governments.
- Revising national policy on elderly care and reviewing existing legislations to protect from elder abuse.

Role of NGOs

- Trained individuals in NGOs can educate and create awareness about redressal mechanisms amongst elderly.

Role of Medical Colleges: Include elder abuse & its prevention in UG/PG curriculum/CMEs to sensitize doctors/health care staff to identify elder abuse.

Research: More research is required on this issue, especially qualitative study to identify the causal risk factors and socio-economic issues associated with the elder abuse.

STRENGTHS OF THE STUDY

- The participants were recruited in the study only after they got satisfactory scores in the Mini Cognitive Test.
- Validated questionnaire like 'Geriatric Mistreatment Scale' was used.
- Socio-demographic factors associated with knowledge and awareness about elder abuse and its reporting were identified.
- The study also assessed the awareness among elderly regarding redressal mechanisms for elder abuse.

LIMITATIONS OF THE STUDY

- Since the questionnaire in this study included sensitive questions, participants could have been hesitant to give private information, thus, response bias could have been subjected.
- This study was cross-sectional household survey (quantitative study). There could have been qualitative components like socio-cultural aspects and risk factors associated with abuse, which were not explored.
- This study was conducted in rural areas, so the results of the study cannot be generalized in urban areas.
- There was no direct observation of the incidents by the investigator, only self – reported cases of elder abuse were included in the study.
- No verification of cases of elder abuse was done from local police, health authorities or NGOs.

SUMMARY

The present study was undertaken in the rural field practice areas of PHC Vantamuri in Belagavi taluka of Belagavi district, Karnataka state of India, among 400 elderly (≥60 years) population. The study was conducted from 1st January 2020 to 31st December 2020 to find out the prevalence of elder abuse and its awareness among the elderly population. After obtaining informed consent from the elderly, they were interviewed and asked questions about their experience of facing abuse and the perpetrators of abuse. The study also attempted to understand whether the victims of elder abuse approached anyone to sought any redressal, and if not, the reasons for the same.

Out of 400 study participants, 255 (63.7%) elderly belonged to the age group of 60 - 69 years. The mean age of the study subjects was 68.18 ± 7.12 years with a range of 60 - 91 years and median age was 66 years. It was noted that 252 (63%) elderly were females and 148 (37%) elderly were males. Among 400 participants, 255 (63.7%) were married, 144 (36%) were widowed and only one (0.3%) was single. Majority 350 (87.5%) followed Hinduism, 46 (11.5%) were Muslim and 4(1%) participants followed Christianity. Out of 400 elderly participants, 158 (39.5%) belonged to OBC category, followed by 126 (31.5%) from ST category, 91 (22.75%) belonged to general category and 25 (6.25%) were from SC category. Most of them were living in a joint family (313, 78.25%), followed by 87 (21.75%) living in a nuclear family. Out of all the participants studied, 354 (88.5%) lived with their families, followed by 24 elderly who lived only with their spouse (6%), 17 elderly who lived alone (4.3%), 5 subjects lived with a relative and any other person (1.25%). Literacy status of the study participants revealed that 255 (63.7%) and 145

(36.25%) were illiterates and literates respectively. With respect to occupation, it was observed that 201 (50.2%) were unemployed/retired, 114 (28.5%) were employed and 87 (21.8%) were homemakers. According to the study participants' house ownership status, it was noted that 239 (59.75%) elderly owned their house, whereas 83 (20.75%) lived in a house owned by their spouse, 62 (15.5%) lived in a house owned by others and 16 (4%) reported to be living in a rented house. Among the 400 study subjects, 141 (35.25%) belonged to Class V, 140 (35%) to Class IV, 71 (17.75%) to Class III, 32 (8%) to Class II and 10 (2.5%) belonged to Class I socioeconomic status according to Modified B.G. Prasad's Classification.

When the elderly participants were asked about their health status, it was noted that the leading comorbidities observed among elderly were hypertension (161, 40.3%), joint pain (152, 38%), diabetes (100, 25%), hearing defect/loss (40, 10%), vision defect/loss and oro-dental caries each (29, 7.2%), and 30 (7.5%) elderly reported other health problems such as malnutrition/obesity, congestive heart disease, stroke/paralysis, renal failure/chronic kidney disease etc. Most of the participants had one (145, 36.3%) or two (102, 25.5%) comorbidities.

When asked about elderly's perception on what amounts to elder abuse the most, 127 (31.59%) responded that it was beating/slapping, followed by unwelcome/forcible sexual contact (10, 25.3%), verbal abusing (6,15.17%), economic exploitation (42, 10.45%) and neglect/disrespect (36, 8.96%). Out of 400 elderly participants who were asked about their perception on prevalence of elder abuse in any form, 339 (84.75%) responded that it is prevalent and 33 (8.25%) responded that it is not. The elderly participants were also asked about their perception on the prevalence of elder abuse out of 10 houses. 165 (45%) perceived

the prevalence to be 1 - 3 out of 10 houses, 163 (44%) perceived the prevalence to be 4 – 6 out of 10 houses and 41 (11%) perceived the prevalence to be 7 - 10 out of 10 houses. Lastly, in this section the participants were inquired about their perception on the type of elder abuse most prevalent. Maximum number of participants, i.e., 119 (29.8%) responded that it was neglect/disrespect, followed by economic exploitation (91, 22.8%), verbal abusing (77, 19.3%) and beating/slapping (34,8.5%). Only 3 (0.8%) participants responded that unwelcome/forcible sexual contact was most prevalent.

Among the 400 elderly participants, the percentage of prevalence of elder abuse was found to be 17% (68 victims). Among all these cases, maximum number of them were facing psychological abuse (59, 52%), followed by economic exploitation (24, 21%), neglect (23, 20%) and physical abuse (8, 7%). None of the participants had experienced sexual abuse.

The 68 participants experiencing elder abuse were asked about its duration to which maximum number of them, i.e., 41 (62%) responded it to be 0 – 4 years, followed by 22 (38%) who responded it to be 5 years and beyond. The mean duration of abuse was around 4 years (Mean = 3.9 ± 2.6 years). All 68 cases of elder abuse were questioned about the frequency of experiencing each type of abuse. It was found that 45 (66.17%) individuals experienced elder abuse almost daily, followed by 25 (36.76%) experiencing it once a week, 28 (41.17%) experiencing it once a month and 9 (13.23%) experienced it once in few months. The type of abuse which was most frequent and occurs almost daily was neglect/disrespect (32,47.06%) followed by economic exploitation (8, 11.76%), verbal abuse (3, 4.4.1%) and beating/slapping (2, 2.94%). Among the 9 participants who faced abuse

once in few months, four (5.88%) had experienced verbal abuse followed by neglect/disrespect (3, 4.41%) and economic exploitation (2, 2.94%). When the elderly participants were asked about the person responsible for abusing them, maximum number of them (50, 73.53%) answered it was their 'daughter-in-law', followed by their 'son' (40, 58.82%) and one (1.47%) participant each answered it was both their 'daughter' and 'son-in-law'.

Out of all 68 elderly participants who faced abuse in any form, only 19 (27.9%) made an attempt to report it. 11 (16.17%) answered that they had reported it to a 'relative', followed by a 'friend' (10, 14.7%), other family member (7, 10.29%), extended family member and social worker (1, 1.47%). 13 (19.11%) responded that it was due to "confidence in the ability of the person/ agency to solve the problem", that they approached them for help. 7 (10.29%) participants answered that they 'Did not know any other way to deal with the problem'. 16 (23.52%) responded that the person / agency who they had approached for reporting abuse counseled their family. None of the participants in this study got complete resolution for their issue of abuse.

The 48 elderly participants who experienced elder abuse were asked about the reasons for not reporting it. 25 (36.76%) answered it was 'to maintain confidentiality of the family matter', 18 (26.47%) answered it was due to 'fear of retaliation', 9 (13.23%) replied that they 'did not know how to deal with problem', 6 (8.82%) answered that they "lacked Confidence in ability of any person/ agency to solve problem" and four (5.88%) answered that it was due to the "apparent ineffectiveness of available channels of reporting and redress".

All the 68 participants experiencing elder abuse were asked about their opinion for dealing with prevalent elder abuse effectively. 48 (70.58%) participants answered that elder abuse can be dealt by 'sensitizing young adults', followed by 39 (57.35%) who answered it should be by "increasing economic independence of the abused", 26 (38.23%) answered it should be by "sensitizing children and strengthening inter-generational bonding", 23 (33.82%) answered it should be by "developing effective legal reporting and redress system", 12 (17.64%) answered it should be by "developing effective social reporting and redress system" and 11 (16.17%) answered it should be by 'developing self-help groups of older persons to provide assistance and intervention'.

When 68 participants experiencing abuse were asked about their awareness regarding reporting and redressal mechanisms, 53 (77.94%) participants answered they were not aware and 14 (20.58%) answered they were aware. Among the 14 participants, 9 (13.23%) were aware about 'police help line', 5 (7.35%) were aware about "Maintenance and Welfare of Parents and Senior Citizens Act 2007 (MWPSC Act)", 2 (2.94%) were aware about 'Help Age India's help line', and only one participant knew about the 'Tribunal under the MWPSC Act'. The 14 participants were further asked to state the source of their awareness about reporting and redressal mechanisms. 10 (14.7%) answered it was their 'friends/neighbour', 4 (5.88%) answered it was 'newspaper', 3 (4.41%) answered it was 'television' and 'family' each and only 2 (2.94%) answered it was 'radio' and 'IEC material' each.

5 (7.35%) participants who said they were aware about MWPSC Act, had not availed any benefit under the MWPSC Act. 3 (4.41%) answered that they had faced challenges while availing benefits, most common being 'lack of knowledge of

service providers' (3, 4.41%), followed by "lack of resources to fight case in court" (2, 2.94%) and 'long waiting time for redressal of issue' (1, 1.47%). Even though 5 (7.35%) participants out of 68 had stated that they were about the MWPSC act, they did not have the knowledge on how to avail benefits under the act. 3 (4.41%) answered it was 'difficult' to avail benefits under MWPSC Act and did not know about the affordability for the same but 2 (2.94%) participants perceived that it was 'somewhat expensive/expensive' to avail benefits under the Act. All the 5 (7.35%) participants who were aware of the MWPSC Act perceived that the act provides for their welfare and social protection.

The Chi-square test results showed that statistically significant association was present between participants belonging to 60 – 69 years age group and perceiving that 'neglect' or 'physical abuse' or 'economical exploitation' or 'sexual abuse' amounts to elder abuse the most (p=0.01, p=0.01, p=0.01, p=0.007), participants belonging to reserved category and perceiving that 'neglect' or 'verbal abuse' amounts to elder abuse the most (p=0.04, p=0.03) and married participants perceiving that 'sexual abuse' amounts to elder abuse the most (p=0.05). Significant statistical association was found when the elderly was 'unemployed/ retired/homemaker' or 'owned' their house and perceived that elder abuse is prevalent in the society (p=0.02, p=0.002). The chi-square test results also showed that the association between elderly who belonged to lower socio-economic status and perceived that 'neglect' or 'physical abuse' or 'verbal abuse' is the most prevalent, was statistically significant (p=0.027, p=0.05, p=0.04). The participants who were married and perceived that 'neglect' or 'verbal abuse' is most prevalent, were also found to have statistically significant association (p=0.015, p=0.03).

Statistically significant association was found between the participants who were single/widowed and had experienced neglect (p=0.04), and also between female elderly participants who had experienced economical exploitation (p=0.02). Binary logistic regression analysis results showed that single/widowed compared to married elderly participants were 0.02 times (95% C.I. 0.001 – 0.0781, p=0.03) likely to experience physical abuse than not to experience it. Unemployed elderly participants compared to employed participants were 0.07 times (95% C.I. 0.0 – 0.923, p=0.04) likely to experience psychological abuse than not to experience it. Elderly participants belonging to reserved category compared to participants belonging to general category were 5.92 times (95% C.I. 1.234 – 28.412, p=0.02) more likely to experience neglect than not to experience it. Female elderly participants compared to male participants were 6.43 times (95% C.I. 1.240 – 33.388, p=0.02) more likely to experience economical exploitation than not to experience it, and elderly participants belonging to lower socioeconomic status compared to participants belonging to higher socio-economic status were 0.11 times (95% C.I. 0.018 – 0.770, p=0.02) likely to experience economical exploitation than not to experience it.

Chi-square results showed that the association between the elderly participants belonging to 60 – 69 years age group and who had experienced elder abuse for 0 – 4 years was found to be statistically significant, and elderly participants belonging to ≥ 70 years age group were found to have statistically significant association for experiencing elder abuse for ≥5 years (p=0.002). The association between married elderly participants and experiencing elder abuse for 0 – 4 years was found to be statistically significant, and single/widowed elderly

participants were found to have statistically significant association for experiencing elder abuse for ≥5 years (p=0.03).

Binary logistic regression analysis between the sociodemographic profile of the study participants and elder abuse duration showed that elderly participants belonging to age group ≥ 70 years were 4.77 times more likely (95% C.I. 1.054 – 21.605, p=0.04) to experience elder abuse for 0 – 4 years than ≥5 years.

Chi-square results showed statistically significant association present between elderly participants who owned their house and had experienced any form of abuse by their son (p=0.05), and also between elderly participants who were unemployed/retired/homemaker and had experienced any form of abuse by their daughter – in - law (p =0.03). Binary logistic regression analysis showed that elderly participants who owned their house compared to those participants whose houses were owned by spouse /others /rented, were 4.217 times (95% C.I. 1.123 – 15.834, p=0.03) more likely to experience abuse by their son than not to experience it.

Statistically significant association was found with socio-demographic characteristics such as elderly who were ≥ 70 years old (p=0.01), single/widowed (p=0.03), staying in joint type of family (p=0.04), having 1 – 5 family members (p=0.01) and living with family/spouse (p=0.01). Binary logistic regression analysis between the sociodemographic profile of the study participants and the cases of elder abuse reported showed that elderly participants belonging to ≥ 70 years age group compared to elderly in 60 – 69 years age group were 12.23 times (95% C.I. 1.433 – 104.461, p=0.02) more likely to report abuse, and elderly participants who were illiterate compared to literate participants were 30.72 times (95% C.I. 2.059 –

458.665, p=0.01) more likely to report abuse than keep silent. Other socio-demographic factors like gender, religion, occupation, ownership of house and socio-economic status, did not show any significant association.

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ANNEXURE 1 : ETHICAL CLEARANCE CERTIFICATE

K.L.E. ACADEMY OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University)
Accredited 'A' Grade by NAAC (2nd Cycle) Placed in Category 'A' by MHRD (GoI)
JAWAHARLAL NEHRU MEDICAL COLLEGE,
NEHRU NAGAR, BELAGAVI-590010 (KARNATAKA-INDIA)
Website: http://www.jnmc.edu
E-Mail : dome@jnmc.edu
Phone: (+91-0831) Office : 2472330
Principal: 2471701
Fax No. +91-0831 – 2470759

Ref: MDC/DOME/ 324 **Date: 1/01/2020**

To,

REG NO: BD0119004

PG Student in Community Medicine,
J N Medical College,
BELAGAVI.

Sub: Institutional Ethical Clearance for the study.

With reference to the above, we wish to inform you that your proposed research project titled **"KNOWLEDGE, ATTITUDE AND PRACTICES OF RATIONAL USE OF MEDICINES AMONG THE POSTGRADUATE RESIDENTS OF A TERTIARY CARE TEACHING HOSPITAL IN NORTH KARNATAKA – A CROSS –SECTIONAL STUDY "** is ethical and justifiable. The proposed research project has been cleared by the JNMC Institutional Ethics Committee on Human Subjects Research.

(Dr. Roopa M Bellad)
Chairman,
JNMC Institutional Ethics Committee
on Human Subjects Research,
J.N.Medical College, Belagavi.

ANNEXURE 2: INFORMED CONSENT FORM

"Prevalence of elder abuse in the rural field practice area of Belagavi district; a cross-sectional study."

INVESTIGATOR: Dr. GUIDE: Dr.

INTRODUCTION:

You are being invited to participate in this study to know the knowledge, attitude and practices regarding elder abuse among the elderly population (age > 65 years) in the rural field practice area of Belagavi district.

METHODOLOGY:

If you agree to participate in this study, you will have to answer a few prepared questions about your general health information and socio-demographic details. Questions will be asked to assess your knowledge and understand your perception towards elder abuse and redressal mechanisms for the same. One of the sections of the interview will constitute questions asking about your personal experience, which will be continued to ask only if you are comfortable answering.

WITHDRAWAL:

Your participation in this study is purely voluntary. You may decide to participate or not. In case you decide not to participate, nothing will happen and there will not be any loss to you. If you decide to participate now and later think of withdrawing from the study, you will be free to do so.

CONFIDENTIALITY:

All the data collected will remain confidential and only aggregated data will be published or presented in the conference / workshops. Your personal identity will not be revealed.

POSSIBLE BENEFITS:

The investigator does not promise that you will receive any direct benefit in this study. It will benefit the whole community and will help the policy makers to design new programmes for senior citizens to prevent elder abuse.

POSSIBLE RISKS: There is no matter of risk, here I am going to interview you only.

COSTS OF PARTICIPATION:

The cost of the study will be borne by the researcher. There will be no additional cost to you for participating in this study.

PAYMENT OF PARTICIPATION:

There will be no incentives for you for participating in this study.

QUESTIONS REGARDING STUDY:

If you have any questions, or concerns, you may contact:

Principal Investigator**: Dr.** _____, PG student, Dept. of Community Medicine, Jawaharlal Nehru Medical College, KAHER, Belagavi – 590010

Guide: **Dr. _____.**, Professor & Head, Department of Community Medicine, Jawaharlal Nehru Medical College, KAHER, Belagavi - 590010.

If you have any questions about your rights as a study participant, you may contact: **Dr. _____** Principal, Jawaharlal Nehru Medical College, KAHER, Belagavi – 590010.

Dr. Roopa M. Bellad, Chairperson, Institutional Ethics Committee on Human Subject's Research, JNMC, KAHER, Belagavi - 590010. Ph no.: 0831-2471702

LEGAL RIGHTS: By signing the consent form, you are not waiving off any of your legal rights.

'CONSENT STATEMENT'

"I volunteer and consent to participate in this study. I have read (or have been read to me) the information sheet thoroughly. Full opportunity was given to me to ask questions. I am fully satisfied with the answers to the questions I wanted to ask. I hereby voluntarily agree to participate in this investigation. Furthermore, I recognize that I have full rights to withdraw this consent at any time during the investigation. I understand that information given by me will be confidential and used for research purpose only."

"Further I am aware that the results of the research will be published without disclosing any identification of the participants."

_____

Name and Signature/Left Hand Thumb impression

_____

Name and Signature of Person Obtaining Consent

_____

Name and Signature of Witness

DATE: _____

PLACE: _____

ANNEXURE 3: PROFORMA

K.L.E. ACADEMY OF HIGHER EDUCATION AND RESEARCH

J. N. MEDICAL COLLEGE, BELAGAVI

DEPT. OF COMMUNITY MEDICINE

ELDER ABUSE QUESTIONNAIRE

INVESTIGATOR: Dr. GUIDE: Dr.

Sl. No.: _____ DATE OF INTERVIEW:_____

NAME OF SUBJECT:_____

PART 1 - MINI COGNITIVE TEST

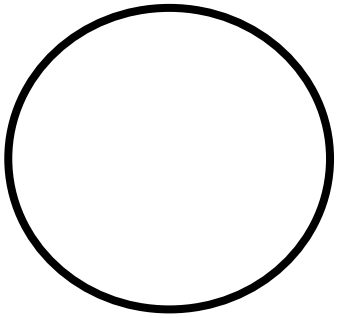
STEP 1: THREE WORD REGISTRATION

Please repeat the three words that the investigator is going to say and try to remember them.

Version 1	Version 2	Version 3	Version 4	Version 5	Version 6
Banana Sunrise Chair	Leader Season Table	Village Kitchen Baby	River Nation Finger	Captain Garden Picture	Daughter Heaven Mountain

STEP 2: CLOCK DRAWING (0 or 2 points)

Please draw a clock by first putting the numbers and then set the arms to 10 past 11.



STEP 3: THREE WORD RECALL (0-3 points)

Please recall the three words you were asked to remember.

Word list version:_____ Person's answer:

TOTAL SCORE:

PART 2 - SOCIO DEMOGRAPHIC DETAILS

1. Age (in years):	2. Sex: Male/Female
3. Marital Status: Married / Single / Widowed / Divorced/ Separated / Not stated	4. Address: House no. Galli Village/ Ward
5. Religion: Hindu / Muslim / Christian / Others (specify)	6. Category: General / SC/ ST / OBC
7. Type of Family: Nuclear / Joint	8. Number of members in the family:
9. Living Arrangements: a. With family b. With spouse only c. With relative d. Alone e. With any other	10. Education Status (self): a. Illiterate b. School - 1 to 5 years c. School - 6 to 10 years d. Class XI and XII/ ITI Diploma e. Graduate/ Post graduate
11. Occupation (self): a. Self employed b. Govt. Service c. Private Service d. Farmer e. Labourer f. Homemaker g. Unemployed/ Retired	12. Do you own house or you live in on rent? a. Self-owned b. Owned by spouse c. Owned by others d. Rented: Rs. ___/ Month
13. Monthly income: Rs. _____	14. Household income: Rs. _____
15. Socio economic status: I / II/ III/ IV / V (As per modified B G Prasad's classification)	

PART 3 - GENERAL HEALTH

Q3.1. Do you have any of the following? (Multiple responses)

A) Hypertension B) Diabetes Mellitus C) Congestive heart disease

D) Stroke/Paralysis E) Renal failure/ Chronic Kidney Disease F) Joint pain

G) Hearing defect/loss H) Vision defect/loss I) Oro-dental caries

J) Malnutrition/obesity K) Others, specify

PART 4 : ELDER ABUSE KNOWLEDGE AND PERCEPTION

Q4.1. What according to you amounts to Elder Abuse? Please rank the abuses mentioned by you, where rank 1 mean "most appropriate"?

Neglect/ Disrespect (a)	Beating/ Slapping (b)	Verbal abusing (c)	Economic exploitation (d)	Unwelcome/ Forcible sexual contact(e)	Others, specify (f)	Don't know (g)

Q4.2. Do you think that 'Elder Abuse' in any form is prevalent in our society?

a) No b) Yes

Q4.3. What according to you is the prevalence of 'Elder Abuse' in our society?

_____Out of 10 houses

Q4.4. What are the forms in which Elder Abuse is prevalent in our society? Please rank the forms of abuses prevalent in our society, where rank 1 mean “most prevalent”.

Neglect/ Disrespect (a)	Beating/ Slapping (b)	Verbal abusing (c)	Economic exploitation (d)	Unwelcome/ Forcible sexual contact(e)	Others, specify (f)	Don’t know (g)

PART 5 - MODIFIED GERIATRIC MISTREATMENT SCALE

QUESTION (experience in six months preceding the survey)	RESPONSE (YES OR NO)
5.1. Have you been hit?	
5.2. Have you been punched or kicked?	
5.3. Have you been shoved, or have you had your hair pulled?	
5.4. Have you had an object thrown at you?	
5.5. Have you been assaulted with a knife or blade?	
5.6. Have you been humiliated or made fun of?	
5.7. Have you been treated with indifference or ignored?	
5.8. Have you been isolated or kicked out of the house?	
5.9. Has anyone made you feel afraid?	
5.10. Have your decisions not been respected?	
5.11. Have you been forbidden to go out or be visited?	
5.12. Has anyone kept you from getting clothes, footwear, etc.?	
5.13. Has anyone kept you from receiving the medications you need?	
5.14. Have you been denied protection when you need it?	
5.15. Have you been denied access to the house where you live?	
5.16. Has anyone managed or is anyone managing your money without your consent?	
5.17. Has your money been taken from you?	
5.18. Has anyone taken any of your belongings without your permission?	
5.19. Have any of your properties been sold without your consent?	
5.20. Have you been pressured so that you no longer own your house or any other property?	
5.21. Have you been forced to have sex even if you did not want to?	
5.22. Has anyone touched your genitals without your consent?	

PART 6 - ABUSER PROFILE

Q6.1 For how long have you been facing abuse? Please give details of duration.

- ____ years (RECORD '00' IF LESS THAN ONE YEAR)

Q6.2 In the last one year, how many times did you face……(abuse)?

TYPE OF ABUSE	ALMOST DAILY	ONCE IN A WEEK	ONCE IN A MONTH	ONCE IN FEW MONTHS	VERY RARELY
a) Neglect / Disrespect					
b) Beating/ Slapping					
c)Verbally Abusing					
d) Economic Exploitation					
e) Unwelcome or forcible Sexual Contact					
f) Others, specify					

Q6.3 Who was responsible for the abuse? Please rank the people who abused you, where 1 mean "person who abused you most". (MULITPLE RESPONSE).

a) Spouse/partner b) Son c) Daughter

d) Grand-child e) Parent f) Caregiver / servant

g) Son-in-law h) Daughter-in-law i) Others (Specify _____)

PART 7 - REDRESSAL MECHANISMS

Q7.1 Have you made any attempt to report these incidents to any person / agency?

a) No b) Yes

Q7.2 Whom (person / agency) did you approach? Please mention about all approaches. Please rank the person / agency in the order you approached one by one, where 1 mean first time. (MULITPLE RESPONSE)

a) Other family Members b) Extended Family Member

c) Relative d) Friend

e) Community Leader f) Social Worker

g) Senior Citizens' Association h) Residents' Welfare Association

i) Local Police / police helpline j) NGO

k) HelpAge NGO / Staff / helpline number l) Others (Specify _____)

Q7.3 Why did you approach those person / agencies? MULTIPLE RESPONSE

a) Due to confidence in their ability to resolve the issue

b) Did not know how to deal with the problem

c) To maintain confidentiality of the family matter

d) Apparent ineffectiveness of other methods

e) Others (Specify _____)

Q7.4 Did that person/agency help you? If yes, in what ways it helped? MULITPLE RESPONSE

a) Person / agency provided knowledge to fight against Elder Abuse

b) Person / agency counselled my family

c) Person / agency counselled me

d) My case was registered

e) I was referred to seek help from court

f) I was referred to meet some NGO

g) I was told to use HelpAge helpline number or to meet HelpAge official

h) Did not help me

i) Others (Specify _____)

Q7.5 Has your issue been resolved?

a) No 1 b) Yes 2

Q7.6 ASK IF CODED "1" IN Q7.1 You said that you did not report the matter, please give reasons for not reporting. (MULITPLE RESPONSE)

a) Lacked Confidence in the ability of any person/ agency to resolve the matter

b) Did not know how to deal with the problem

c) To maintain confidentiality of family matter

d) Apparent ineffectiveness of existing portals of reporting and redress

e) Fear of Retaliation

f) Others (Specify _____)

Q7.7 How can we deal effectively with Elder Abuse prevalent in our society? Please rank the ways mentioned by you to deal effectively with Elder Abuse, where 1 mean "most effective". (MULITPLE RESPONSES)

a) Increasing economic freedom of the abused

b) Developing effective legal reporting and redress system

c) Developing effective social reporting and redress system

d) Sensitizing children and strengthening intergenerational bonding

e) Sensitizing young adults

f) Developing self-help groups of elderly to provide assistance and intervention

g) Others (Specify _____)

Q7.8 Are you aware of the following reporting and redressal mechanisms?

MULITPLE RESPONSE READ ONE BY ONE

a) Maintenance and Welfare of Parents and Senior Citizens Act 2007(MWPSC Act)

b) Tribunal Under the MWPSC Act

c) Police Help Line

d) HelpAge India's Help Line

e) Not aware

f) Others (Specify _____)

Q7.9 What was your source of awareness? MULITPLE RESPONSE PROBE FOR MORE

a) Television b) Radio c) Newspaper

d) IEC material (poster / banner /etc.) e) Family f) Friends / Neighbour

g) HelpAge NGO h) Any other NGO i) Others, Specify _____

Q7.10 Ask if Q7.8 =1 or 2. Have you ever availed benefits under MWPSC Act for yourself?

a) No b) Yes

Q7.11 Ask if Q7.8 =1 or 2. Did you face any challenge while availing benefits under MWPSC Act?

a) No 1 b) Yes 2 c) Don't know / Can't say

Q7.12 Ask if Q7.8 =1 or 2 and Q7.11=2 What were the challenges faced by you?

(MULITPLE RESPONSE)

a) Lack of infrastructure / resources from government Yes / No

b) The procedure was complex, tedious and iterative Yes / No

c) Lack of knowledge of service providers Yes / No

d) Behavioural issues and disrespect with elders Yes / No

e) Long waiting time for redressal of issue Yes / No

f) Threat from family member Yes / No

g) Lack of resources to fight case in court Yes / No

h) Don't Know / Can't Say

i) Others (Specify _____)

Q7.13 Ask if Q7.8 =1 or 2. Did you get resolution under MWPSC act? If yes, how much satisfied are you with the resolution provided?

a) Got resolution and fully satisfied b) Got resolution but partially satisfied

c) Got resolution but dissatisfied d) Did not get resolution 4

e) Don't know / can't say 5

Q7.14 Ask if Q7.13= b or c. What are the reasons for dissatisfaction? (MULITPLE RESPONSE)

a) Decision was not in my favour

b) Compensation amount was not adequate

c) Did not receive benefits as per provisions under MWPSC act

d) It was a compromise between me and my family but current behaviour of my family is not appropriate

e) It was a delayed justice / decision was not on time

f) Had financial losses throughout the process

g) It was a comprise between me and my family

h) Did not get adequate compensation

i) Don't know / can't say

j) Others (Specify _____)

Q7.15 Ask if Q7.8 =1 or 2 and Q7.10 =1. Do you know how to avail benefits under MWPSC Act?

a) No b) Yes

Q7.16 Ask if Q7.8 =1 or 2 and Q7.10 =1. If you have to avail benefit under MWPSC Act, how easy or difficult it will be for you?

a) Very easy b) Easy c) Difficult d) Very difficult e) Don't know

Q7.17 Ask if Q7.8 =1 or 2. Do you think it is affordable for you to avail benefits of MWPSC Act?

a) Affordable b) Somewhat Expensive c) Expensive d) Don't Know

Q7.18 Ask if Q7.8 =1 or 2. Does MWPSC Act benefited you, if yes whether directly or indirectly?

a) Yes, directly b) Yes, indirectly c) No benefit 3

Q7.19 Ask if Q7.8 =1 or 2. Do you think MWPSC Act provides social protection to elder people and meant for their welfare?

a) No b) Yes

Q7.20 Ask if Q7.8=1 or 2. Please provide reasons for the same?

(RECORD VERBATIM): …….

ANNEXURE 4: PHOTOGRAPHS

The following picture was taken during data collection in Vantamuri village.

The photograph shown below was taken during data collection in Honaga village

The photograph shown below was taken during data collection in Kakati village.

ANNEXURE 5: IEC MATERIAL (English)

REPORT ELDER ABUSE

A just society treats its elderly with respect

Only 1 *in* 6 cases of ELDER ABUSE is reported

Elder abuse is any act which harms an older person and is carried out by someone they trust such as an adult child, family member, partner, carer or friend.

Physical abuse

Violent behavior, such as hitting and kicking

Psychological abuse

Scolding elderly persons abruptly, ignoring elderly persons

Economic abuse

Spending the pensions or other resources of elderly persons without their permission

Abandonment of care /Neglect

Leaving elderly persons in appalling conditions

INDIA HELPLINE FOR ELDER ABUSE

1) Senior Citizens National Helpline Govt of India Toll Free *14567*
2) Helpage India National Helpline *18001801253*
3) Dignity Foundation *18002678780*
4) Nightingales Medical Trust Bangalore *1090*
5) Police : *100*
6) NIMHANS psychological support *08046110007*

#VoiceAgainstElderAbuse

Maintenance and Welfare of Parents and Senior Citizens (Amendment) Bill 2018.

The ministry of social justice and empowerment has finalised the bill to provide social security to the elderly who face abuse from their family members or assistant relatives who are responsible for their upkeep.

There is a fine of Rs 10,000 and imprisonment of six months or both for abandoning parents with no financial cap for maintenance of parents.

ANNEXURE 6: MAPS

The following is the map showing all the districts of Karnataka state in India.

Figure 1 :Districts of Karnataka

The following map shows all the talukas in Belagavi district, Karnataka, India

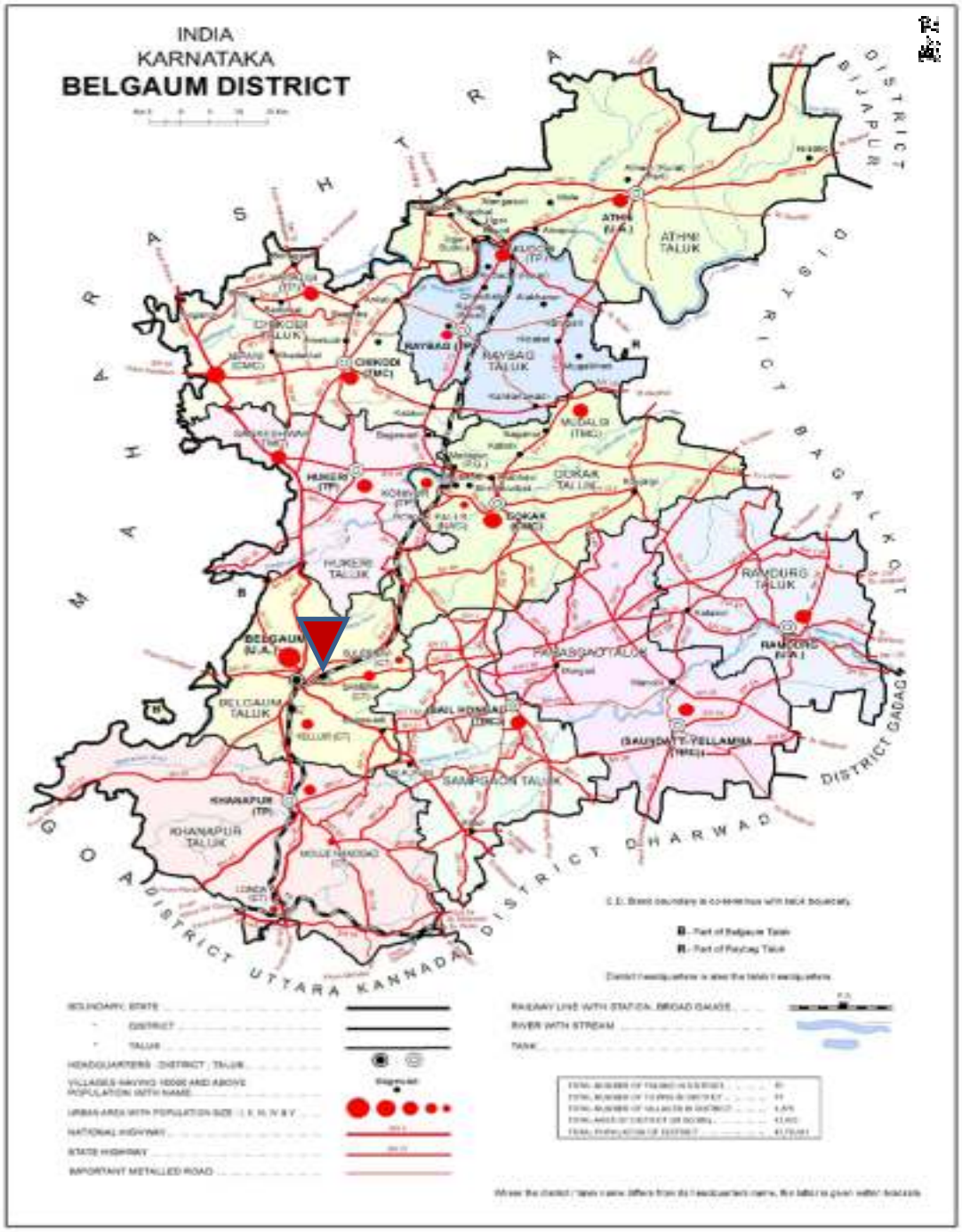


Figure 2: Talukas in Belagavi district, Karnataka, India

The following map shows the rural areas where interviews were conducted in the study i.e., PHC Vantamuri with its sub-centers in Belagavi taluka, Belagavi district, Karnataka, India.

Figure 3: PHC Vantamuri with its sub-centers in Belagavi taluka, Belagavi district, Karnataka, India.

ANNEXURE 7: KEY TO MASTER CHART

GENERAL INFORMATION

A – Serial number

B – AGE: Actual value in years (as on last birthday)

C – AGE INTERVAL

1. 60 - 69 years 2. 70 - 79 years 3. ≥ 80 years

D – GENDER

1. Male 2. Female

E – MARITAL STATUS

1. Married 2. Single 3. Widowed 4. Divorced 5. Separated

F – ADDRESS (sub-center)

1. Vantamuri 2. Kakati 3. Bhutramanahatti 4. Honaga

G – RELIGION

1. Hindu 2. Muslim 3. Christian 4. Others

H – CATEGORY

1. General 2. SC 3. ST 4. OBC

I – TYPE OF FAMILY

1. Nuclear 2. Joint

J – FAMILY MEMBERS: Actual numbers

K – LIVING ARRANGEMENTS

1. With family 2. With spouse only 3. With relative 4. Alone 5. With any other

L – EDUCATION STATUS

1. Illiterate 2. School - 1 to 5 years 3. School - 6 to 10 years

4. Class XI and XII/ ITI Diploma 5. Graduate/ Post graduate

M - OCCUPATION

1. Self-employed 2. Govt. Service 3. Private Service 4. Farmer

5. Labourer 6. Homemaker 7. Unemployed/ Retired

N - Do you own house or you live in on rent?

1. Self-owned 2. Owned by spouse 3. Owned by others 4. Rented: Rs. /month

O – MONTHLY INCOME: Rs……

P – HOUSEHOLD INCOME: Rs……

Q – SOCIOECONOMIC STATUS

1. Class I 2. Class II 3. Class III 4. Class IV 5. Class V

PART 3 - GENERAL HEALTH

Q3.1. Do you have any of the following? (Multiple responses) 1. Yes 2. No

R) Hypertension **S)** Diabetes Mellitus **T)** Congestive heart disease

U) Stroke/Paralysis **V)** Renal failure/ Chronic Kidney Disease **W)** Joint pain

X) Hearing defect/loss **Y)** Vision defect/loss **Z)** Oro-dental caries

AA) Malnutrition/obesity **AB)** Others, specify_____

PART 4: ELDER ABUSE KNOWLEDGE AND PERCEPTION

Q4.1.1 What according to you amounts to 'Elder Abuse'?

1. Yes 2. No 99. Not applicable

Neglect/ Disrespect **(AC)**	Beating/ Slapping **(AD)**	Verbal abusing **(AE)**	Economic exploitation **(AF)**	Unwelcome/ Forcible sexual contact **(AG)**	Others, specify **(AH)**	Don't know **(AI)**

Q4.1.2 Please rank the abuses mentioned by you, where rank 1 mean "most appropriate"?

1. Yes 2. No 99. Not applicable

Neglect/ Disrespect **(AJ)**	Beating/ Slapping **(AK)**	Verbal abusing **(AL)**	Economic exploitation **(AM)**	Unwelcome/ Forcible sexual contact **(AN)**	Others, specify **(AO)**	Don't know **(AP)**

AQ) - Q4.2. Do you think that 'Elder Abuse' in any form is prevalent in our society?

1. Yes 2. No 3. May be in some places

AR) - Q4.3. What according to you is the prevalence of Elder Abuse in our society?

_____Out of 10 houses (Actual number of houses) 33. Don't know

Q4.4.1 What are the forms in which 'Elder Abuse' is prevalent in our society?

Neglect/ Disrespect **(AS)**	Beating/ Slapping **(AT)**	Verbal abusing **(AU)**	Economic exploitation **(AV)**	Unwelcome/ Forcible sexual contact **(AW)**	Others, specify **(AX)**	Don't know **(AY)**

1. Yes 2. No 99. Not applicable

Q4.4.2 Please rank the forms of abuses prevalent in our society, where rank 1 mean "most prevalent".

Neglect/ Disrespect **(AZ)**	Beating/ Slapping **(BA)**	Verbal abusing **(BB)**	Economic exploitation **(BC)**	Unwelcome/ Forcible sexual contact **(BD)**	Others, specify **(BE)**	Don't know **(BF)**

1. Yes 2. No 99. Not applicable

PART 5 - MODIFIED GERIATRIC MISTREATMENT SCALE

BG) - 5.1. Have you been hit?

BH) -5.2. Have you been punched or kicked?

BI) -5.3. Have you been shoved, or have you had your hair pulled?

BJ) -5.4. Have you had an object thrown at you?

BK) -5.5. Have you been assaulted with a knife or blade?

BL) -5.6. Have you been humiliated or made fun of?

BM) -5.7. Have you been treated with indifference or ignored?

BN) -5.8. Have you been isolated or kicked out of the house?

BO) -5.9. Has anyone made you feel afraid?

BP) -5.10. Have your decisions not been respected?

BQ) -5.11. Have you been forbidden to go out or be visited?

BR) -5.12. Has anyone kept you from getting clothes, footwear, etc.?

BS) -5.13. Has anyone kept you from receiving the medications you need?

BT) -5.14. Have you been denied protection when you need it?

BU) -5.15. Have you been denied access to the house where you live?

BV) -5.16. Has anyone managed or is anyone managing your money without your consent?

BW) -5.17. Has your money been taken from you?

BX) -5.18. Has anyone taken any of your belongings without your permission?

BY) -5.19. Have any of your properties been sold without your consent?

BZ) -5.20. Have you been pressured so that you no longer own your house or any other property?

CA) -5.21. Have you been forced to have sex even if you did not want to?

CB) -5.22. Has anyone touched your genitals without your consent?

1.Yes 2. No

PART 6 - ABUSER PROFILE

CC) - Q6.1 For how long have you been facing abuse? Please give details of duration.

____ years (Actual number of years)

00 – Less than one year duration

99 – Not applicable

Q6.2 In the last one year, how many times did you face……(abuse)?

TYPE OF ABUSE

CD) Neglect / Disrespect

CE) Beating/ Slapping

CF) Verbally Abusing

CG) Economic Exploitation

CH) Unwelcome or forcible Sexual Contact

CI) Others

1. Almost daily 2. Once in a week 3. Once in a month

4. Once in few Months 5. Very rarely

Q6.3 Who was responsible for the abuse? Please rank the people who abused you, where 1 mean "person who abused you most". (MULITPLE RESPONSE).

CJ) Spouse/partner **CK)** Son **CL)** Daughter

CM) Grand-child **CN)** Parent **CO)** Caregiver / servant

CP) Son-in-law **CQ)** Daughter-in-law

CR) Others (Specify _____)

1. Yes 2. No 99. Not applicable

PART 7 - REDRESSAL MECHANISMS

CS) - Q7.1 Have you made any attempt to report these incidents to any person / agency?

1. Yes 2. No 99. Not applicable

Q7.2 Whom (person / agency) did you approach? Please mention about all approaches. Please rank the person / agency in the order you approached one by one. (MULITPLE RESPONSE)

CT) Other family Member **CU)** Extended Family Member

CV) Relative **CW)** Friend

CX) Community Leader **CY)** Social Worker

CZ) Senior Citizens' Association **DA)** Residents' Welfare Association

DB) Local Police / police helpline **DC)** NGO

DD) HelpAge NGO / Staff / helpline number **DE)** Others (Specify _____)

1. Yes 2. No 99. Not applicable

Q7.3 Why did you approach those person / agencies? (MULTIPLE RESPONSE)

DF) Due to confidence in their ability to resolve the issue

DG) Did not know how to deal with the problem.

DH) To maintain confidentiality of the family matter.

DI) Apparent ineffectiveness of other methods.

DJ) Others (Specify _____)

1. Yes 2. No 99. Not applicable

Q7.4 Did that person/agency help you? If yes, in what ways it helped? (MULITPLE RESPONSE)

DJ) Person / agency provided knowledge to fight against Elder Abuse.

DK) Person / agency counselled my family.

DL) Person / agency counselled me.

DM) My case was registered.

DN) I was referred to seek help from court.

DO) I was referred to meet some NGO.

DP) I was told to use HelpAge helpline number or to meet HelpAge official.

DQ) Did not help me.

DR) Others (Specify _____)

1. Yes 2. No 99. Not applicable

DT) - Q7.5 Has your issue been resolved?

1. Yes 2. No 99. Not applicable

Q7.6 ASK IF CODED "1" IN Q7.1 You said that you did not report the matter, please give reasons for not reporting. (MULITPLE RESPONSES)

DU) - Lacked Confidence in the ability of any person/ agency to resolve the matter

DV) - Did not know how to deal with problem

DW) - To maintain confidentiality of family matter

DX) - Apparent ineffectiveness of existing portals of reporting and redress

DY) - Fear of Retaliation

DZ) - Others (Specify _____)

1. Yes 2. No 99. Not applicable

Q7.7 How can we deal effectively with Elder Abuse prevalent in our society? Please rank the ways mentioned by you to deal effectively with Elder Abuse, where 1 mean "most effective". MULITPLE RESPONSES,

EA) - Increasing economic freedom of the abused

EB) - Develop effective legal reporting and redress system

EC) - Develop effective social reporting and redress system

ED) - Sensitize children and strengthen intergenerational bonding

EE) - Sensitize Young Adults

EF) - Develop Self Help Groups of Older Persons to provide assistance and Intervention

EG) - Others (Specify _____)

1. Yes 2. No 99. Not applicable

Q7.8 Are you aware of the following reporting and redressal mechanisms?

(MULITPLE RESPONSES, READ ONE BY ONE)

EH) Maintenance and Welfare of Parents and Senior Citizens Act 2007 (MWPSC Act)

EI) Tribunal Under the MWPSC Act

EJ) Police Help Line

EK) HelpAge India's Help Line

EL) Not aware

EM) Others (Specify _____)

1. Yes 2. No 99. Not applicable

Q7.9 What was your source of awareness? (MULITPLE RESPONSES)

EN) Television **EO)** Radio **EP)** Newspaper

EQ) IEC material (poster / banner /etc.) **ER)** Family

ES) Friends / Neighbour **ET)** HelpAge NGO

EU) Any other NGO **EV)** Others, Specify _____

1. Yes 2. No 99. Not applicable

EW) Q7.10 Ask if Q7.8 =1 or 2. Have you ever availed benefits under MWPSC Act for yourself?

1. Yes 2. No 99. Not applicable

EX) Q7.11 Ask if Q7.8 =1 or 2. Did you face any challenge while availing benefits under MWPSC Act?

1. Yes 2. No 3. Don't know 99. Not applicable

Q7.12 Ask if Q7.8 =1 or 2 and Q7.11=2 What were the challenges faced by you?

(MULITPLE RESPONSES)

EY) Lack of infrastructure / resources from government

EZ) The procedure was complex, tedious and iterative

FA) Lack of knowledge of service providers

FB) Behavioural issues and disrespect with elders

FC) Long waiting time for redressal of issue

FD) Threat from family member

FE) Lack of resources to fight case in court

FF) Don't Know / Can't Say

FG) Others (Specify _____)

1. Yes 2. No 99. Not applicable

FH) Q7.13 Ask if Q7.8 =1 or 2. Did you get resolution under MWPSC act? If yes, how much satisfied are you with the resolution provided?

1. Got resolution and fully satisfied 2. Got resolution but partially satisfied
3. Got resolution but dissatisfied 4. Did not get resolution
5. Don't know / can't say

Q7.14 Ask if Q7.13= b or c. What are the reasons for dissatisfaction?

FI) Decision was not in my favour.

FJ) Compensation amount was not adequate.

FK) Did not receive benefits as per provisions under MWPSC act.

FL) It was a compromise between me and my family but current behaviour of my family is not appropriate

FM) It was a delayed justice / decision was not on time.

FN) Had financial losses throughout the process.

FO) It was a compromise between me and my family

FP) Did not get adequate compensation.

FQ) Don't know / can't say

FR) Others (Specify _____)

1. Yes 2. No 99. Not applicable

FS) Q7.15 Ask if Q7.8 =1 or 2 and Q7.10 =1. Do you know how to avail benefits under MWPSC Act?

1. Yes 2. No 99. Not applicable

FT) Q7.16 Ask if Q7.8 =1 or 2 and Q7.10 =1. If you have to avail benefit under MWPSC Act, how easy or difficult it will be for you?

1. Very easy 2. Easy 3. Difficult 4. Very difficult 5. Don't know

FU) Q7.17 Ask if Q7.8 =1 or 2. Do you think it is affordable for you to avail benefits of MWPSC Act?

1. Affordable 2. Somewhat Expensive 3. Expensive 4. Don't Know

FV) Q7.18 Ask if Q7.8 =1 or 2. Does MWPSC Act benefited you, if yes whether directly or indirectly?

1. Yes, directly 2. Yes, indirectly 3. No benefit

FW) Q7.19 Ask if Q7.8 =1 or 2. Do you think MWPSC Act provides social protection to elder people and meant for their welfare?

1. Yes 2. No 99. Not applicable

FX) Q7.20 Ask if Q7.8=1 or 2. Please provide reasons for the same?

(RECORD VERBATIM): …….

S.No.	Age	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.10	2.11	2.12	2.13	2.14	2.15	3.1.A	3.1.B	3.1.C	3.1.D	3.1.E	3.1.F	3.1.G	3.1.H	3.1.I	3.1.J	3.1.K	4.1.1							4.1.2							4.2	4.3	4.4.1							4.4.2	
																												A	B	C	D	E	F	G	A	B	C	D	E	F	G			A	B	C	D	E	F	G	A	B
1	77	2	1	3	1	1	1	2	6	1	2	7	1	600	5000	5	1	1	2	2	2	2	1	2	2	2	2	1	1	1	1	1	1	99	2	1	2	2	2	2	99	3	3	99	99	99	99	99	99	1	99	99
2	65	1	2	1	1	1	3	2	10	1	1	6	3	0	6000	5	2	2	2	2	2	2	2	1	2	2	2	1	1	1	1	1	1	99	2	1	2	2	2	2	99	1	4	99	99	99	99	99	99	1	99	99
3	65	1	2	3	1	2	4	2	6	1	2	6	2	0	10000	4	1	2	2	2	2	1	2	1	2	2	2	1	1	1	1	1	1	99	2	1	2	2	2	2	99	1	9	1	1	1	1	1	1	99	1	2
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5	69	1	1	1	1	1	3	1	11	1	3	7	1	600	25000	4	2	2	2	2	2	1	2	2	2	2	2	1	1	1	1	1	1	99	2	1	2	2	2	2	99	1	7	1	1	1	1	1	1	99	2	1
6	70	2	2	3	1	1	1	2	5	1	1	6	1	600	5000	5	1	1	2	2	2	1	2	2	2	2	2	99	99	99	99	99	99	1	99	99	99	99	99	99	1	1	4	99	99	99	99	99	99	1	99	99
7	75	2	2	3	1	1	1	2	5	1	1	6	1	0	3000	5	1	2	2	2	2	2	2	2	2	2	2	99	99	99	99	99	99	1	99	99	99	99	99	99	1	2	0	2	2	2	2	2	2	99	2	2
8	60	1	2	1	1	1	1	1	7	1	1	6	2	0	2000	5	2	2	2	2	2	2	2	2	2	2	2	99	99	99	99	99	99	1	99	99	99	99	99	99	1	1	2	99	99	99	99	99	99	1	99	99
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10	74	2	1	1	2	1	1	1	7	1	2	4	1	800	10000	4	1	1	1	2	2	2	2	1	2	2	2	1	1	1	1	1	1	99	1	2	2	2	2	2	99	1	3	1	1	1	1	1	1	99	1	2
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39	60	1	2	3	4	1	3	1	1	4	1	7	1	1000	1000	5	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	99	2	1	2	2	2	2	99	2	0	2	2	2	2	2	2	99	2	2
40	61	1	1	1	1	1	3	1	4	1	3	7	1	0	4000	5	1	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	99	2	1	2	2	2	2	99	2	0	2	2	2	2	2	2	99	2	2
41	80	3	1	1	1	2	4	1	2	1	3	7	1	1000	2000	5	1	1	2	2	2	2	1	2	2	2	2	1	1	1	1	1	1	99	2	2	1	2	2	2	99	2	0	2	2	2	2	2	2	99	2	2
42	69	1	1	1	1	1	3	2	5	1	1	7	3	1000	6000	4	1	1	2	2	2	2	2	2	2	2	2	99	99	99	99	99	99	1	99	99	99	99	99	99	1	1	33	1	1	1	1	1	1	99	99	99
43	70	2	2	3	1	2	4	2	3	1	1	1	3	3000	4000	4	1	2	2	2	2	1	1	2	2	2	2	99	99	99	99	99	99	1	99	99	99	99	99	99	1	3	33	1	1	1	1	1	1	99	99	99
44	66	1	1	3	1	1	1	2	9	1	1	4	1	0	4000	2	2	2	2	2	2	2	2	2	2	2	2	99	99	99	99	99	99	1	99	99	99	99	99	99	1	2	0	2	2	2	2	2	2	99	2	2
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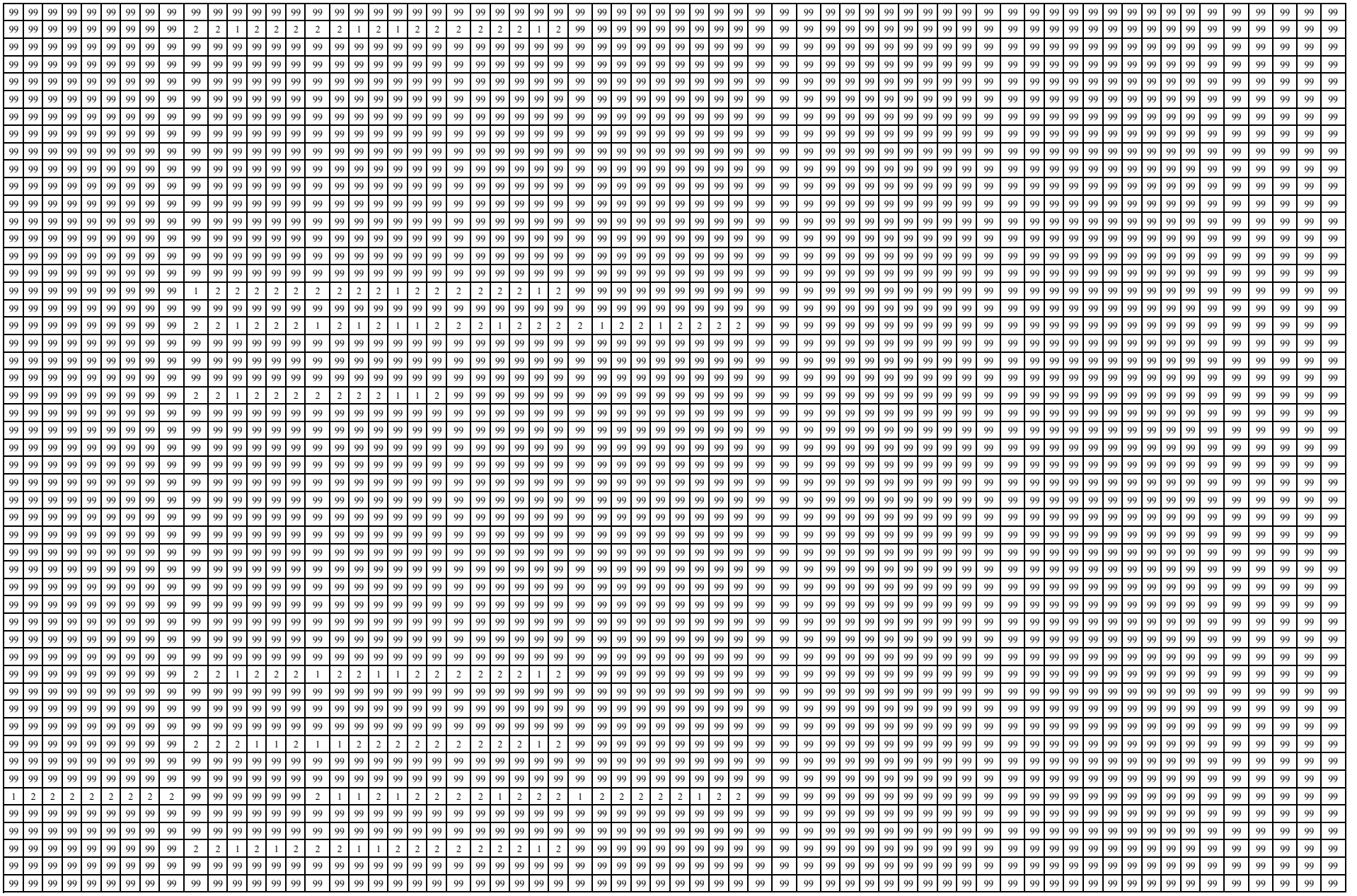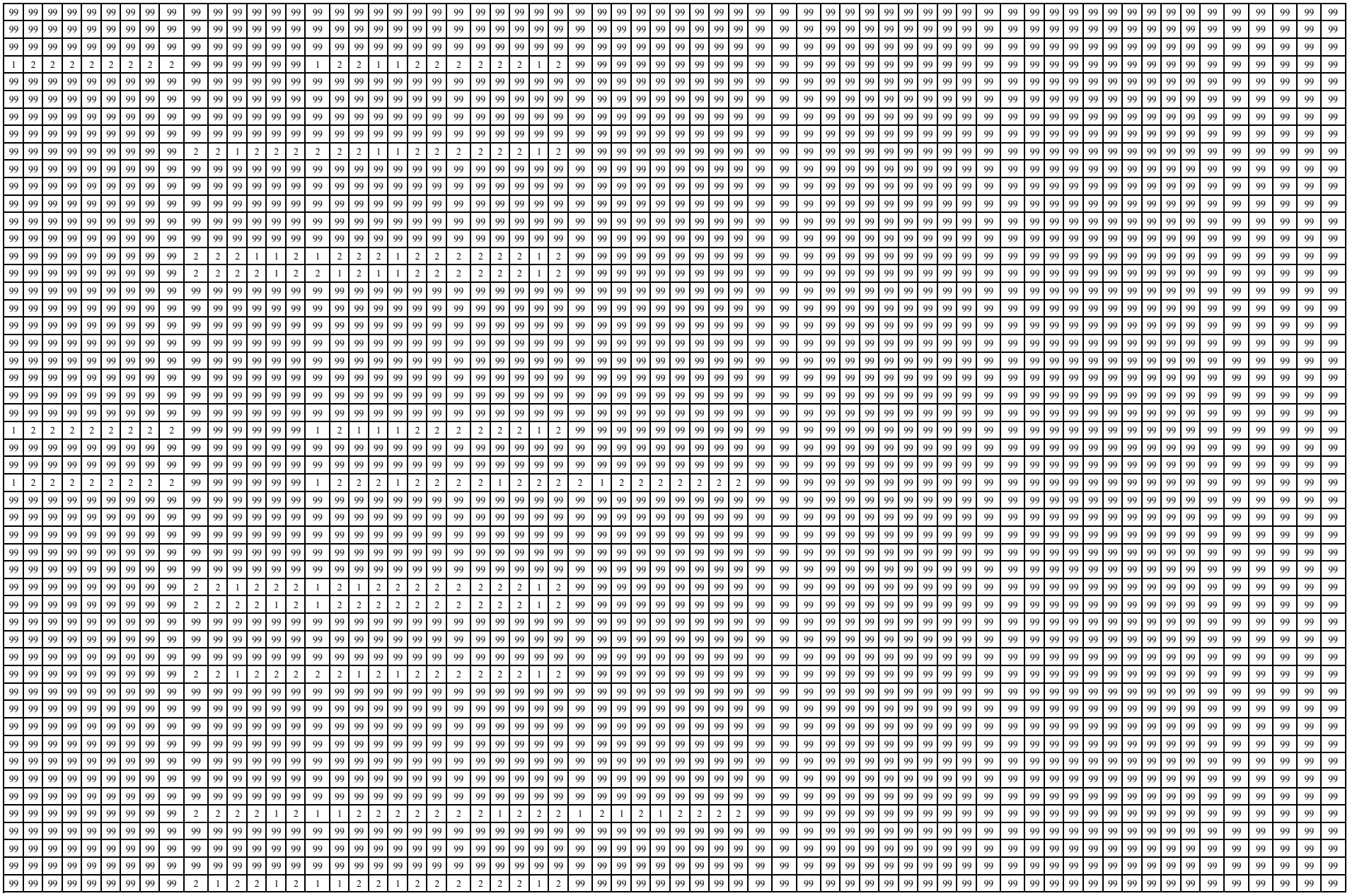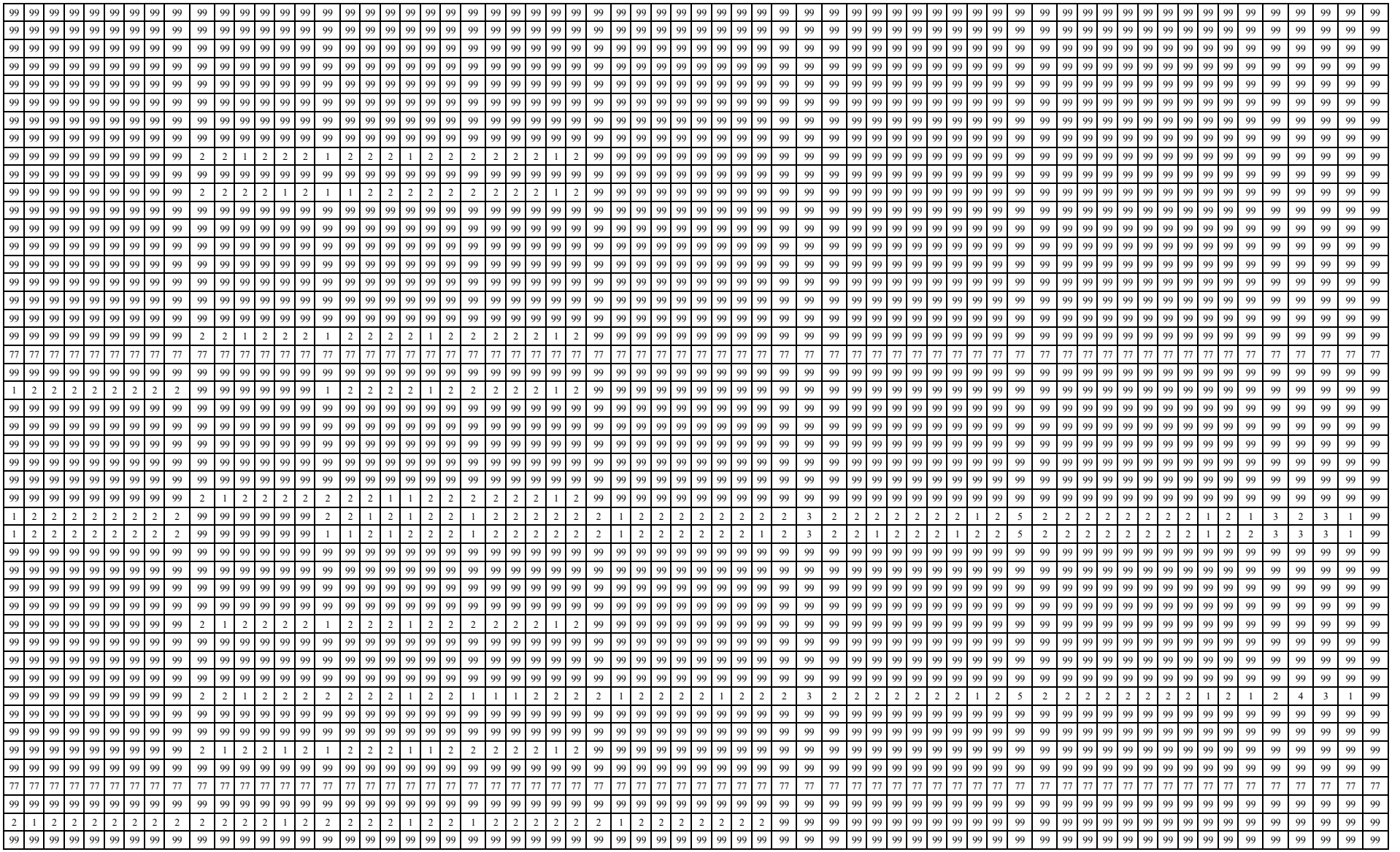
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