RESEARCH ARTICLE

FINANCIAL STATUS OF THE RURAL ELDERLY WOMEN IN MAHARASHTRA DURING POST-COVID-19

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Manuscript Info

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Abstract

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Maharashtra—a state deeply affected by the COVID-19 pandemic—mirrors these challenges. With an estimated population of 125 million, 11.7% of whom are elderly (a figure projected to reach 15% by 2031), the state has been one of India's hardest hit by COVID-19, reporting millions of confirmed cases and substantial fatalities. The pandemic has further exacerbated mental health struggles, social isolation, and economic instability among the elderly, intensifying existing inequities and barriers to financial security. This study focuses on the rural elderly women of Maharashtra, examining the interplay between socio-demographic factors (age, caste, education), economic indicators (family income, personal income, pensions, employment), and participation in self-help groups. Drawing on a cross-sectional survey of 9,253 respondents, it investigates how age caste hierarchies and educational attainment influence family support, income levels, and employment. The analysis reveals significant associations between caste and financial support, age and reduced economic engagement, and education and enhanced earning capacity. Key findings indicate that while generally common, family support diminishes with advanced age and varies significantly by caste and education. Employment opportunities are also tied to caste and education, with marginalized groups frequently trapped in low-income brackets. Notably, higher educational attainment correlates with improved income levels and a greater likelihood of self-help group participation—both critical levers for enhancing financial security and autonomy. Integrating these insights, the article highlights the urgent need for nuanced, multi-dimensional policy responses. Recommendations include expanding pension coverage, bolstering self-help group initiatives, tailoring interventions for marginalized castes, investing in adult education and vocational training, and designing age-sensitive work opportunities. By acknowledging the socio-psychological dimensions shaped by the post-COVID context—such as social isolation and mental health concerns—these interventions can help create a more equitable and supportive environment for elderly women in rural Maharashtra, ensuring that the

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state's demographic future does not come at the cost of its most vulnerable citizens.

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Introduction:-

India is at the cusp of a profound demographic transformation. The country's elderly population, which numbered approximately 104 million in 2011, is projected to reach about 173 million by 2026. This demographic shift, attributed to a sustained increase in life expectancy and a decline in fertility rates, poses new social and economic challenges. Across India, elderly citizens are confronted with issues such as limited financial security, inadequate healthcare infrastructure, and insufficiently developed social welfare mechanisms. Gender disparities further exacerbate these vulnerabilities, as elderly women often experience compounded disadvantages due to lower educational attainment, restricted employment opportunities, and constrained access to governmental support.

Despite an array of government initiatives aimed at improving geriatric care and financial well-being, gaps persist. Many elderly individuals, especially women in rural regions, remain economically vulnerable and socially marginalized. Changing family dynamics, coupled with migration trends, have contributed to increasing social isolation, leaving elderly women more susceptible to emotional distress and mental health challenges. The advent of the COVID-19 pandemic has intensified these concerns: older adults have been disproportionately affected, facing heightened health risks, reduced mobility, and compounded economic insecurities.

Maharashtra, the second-most populous state in India, exemplifies these complexities. With a population estimated at 125 million, the state's elderly population already constitutes 11.7%—surpassing the national average of 10%—and is projected to reach 15% by 2031. During the COVID-19 crisis, Maharashtra emerged as one of the worst-affected regions, recording millions of confirmed cases and a significant number of fatalities. In this fraught context, the state's rural elderly women find themselves at the intersection of multiple stressors: escalating health risks, shrinking economic options, and eroding social support networks.

Understanding the socio-economic and psychological ramifications for this demographic is paramount. Against this backdrop, this study explores the nexus of socio-demographic factors, financial stability, and mental well-being among rural elderly women in Maharashtra. By analysing how age, caste, education, family income, employment, and self-help group participation correlate with each other—and how they influence satisfaction and resilience—this research offers critical insights to policymakers, social workers, and community organizations.

Objectives:-

The main objective was to Examine Socio-Demographic Profiles and to assess Economic Conditions and Financial Support Systems. Further to evaluate the Influence of Socio-Demographic Factors on Economic Well-Being

Literature Review:-

The reviewed literature addresses various socio-economic and demographic challenges in India, focusing on identification systems, food security, aging populations, labour participation, and financial inclusion.

The Unique Identification Authority of India (UIDAI, 2012) highlights the role of Aadhaar in providing every citizen with a unique identity, enhancing access to government welfare schemes. Similarly, the Mumbai Controller of Rationing (n.d.) discusses the ration card system's significance in ensuring food security and equitable access to essential resources for vulnerable populations.

The challenges faced by older adults are addressed extensively. Age well Foundation (2016) emphasizes aging populations' growing needs and vulnerabilities, particularly regarding health, income security, and dignity. Bloom (2023) examines labour force participation among older adults in India, revealing that economic necessity drives many to remain employed despite health issues. Roy and Barua (2023) corroborate this, analysing recent data to highlight that a significant proportion of elderly Indians continue to engage in low-paid, informal work due to inadequate social security systems.

Financial inclusion initiatives are also explored. Hoffmann et al. (2021) analysethe impact of self-help group (SHG) lending programs in rural India, showing significant relief from exploitative moneylenders. SHGs improve financial autonomy and reduce dependency on usury, particularly for women and marginalized groups. These findings underscore the importance of community-based microfinance in promoting financial stability and empowerment.

Research Methodology:-

Study Design and Setting:
This cross-sectional, observational study was conducted between April and December 2022 across rural regions of Maharashtra, a State distinguished by its vast geographic and socio-economic diversity, as well as its pronounced vulnerability during the COVID-19 pandemic. Given that Maharashtra's elderly population already represents 11.7% of the total and is projected to reach 15% by 2031, the state provides a critical lens through which to examine the socio-economic challenges confronting aging rural communities.

Target Population:
The study focused on elderly women aged 60 years and above residing in rural areas of Maharashtra. These individuals often face a spectrum of vulnerabilities, including financial insecurity, reduced employment opportunities, and a heightened risk of social isolation—conditions exacerbated by the ramifications of COVID-19.

Sampling Frame and Size:
Out of the targeted 10,000 households, 9,253 completed interviews formed the final sample after excluding incomplete responses. The sampling frame covered 34 districts and 358 talukas, each chosen based on criteria that included a significant elderly population share (>10%) and diverse caste and educational profiles.

Sampling Technique:
Proportionate random sampling with replacement was employed to ensure a representative distribution across various socio-demographic strata. This approach allowed the study to capture a broad range of factors influencing the financial and psychological well-being of elderly women, including caste classifications, educational attainment, and differing age cohorts.

Data Collection Tools and Procedures:
A semi-structured questionnaire was developed in Marathi, incorporating both closed- and open-ended questions. The questionnaire captured a spectrum of variables, reflecting not only the direct economic conditions but also the broader socio-psychological landscape influenced by the post-COVID context. Key parameters included: Socio-Demographic Factors; Economic Indicators; Social and Financial Support.

Pilot Testing and Refinement:
A pilot study involving 100 participants was conducted prior to the main data collection. Feedback from this initial phase informed refinements to the questionnaire's clarity, cultural appropriateness, and sensitivity, particularly regarding discussions around caste identity, personal finances, and mental well-being during the pandemic.

Ethical Considerations:
Informed consent was obtained from all participants, ensuring voluntary participation, confidentiality, and respect for privacy. Ethical approval was secured from the Poona Hospital and Research Centre's Ethics Committee.

Data Entry and Cleaning:
Responses were coded and entered into a secured database. Data integrity checks, including range and consistency checks, were performed regularly. Any discrepancies or missing values were addressed through follow-up with field teams or by excluding incomplete cases from specific analyses.

Addressing COVID-19 Challenges:
Data collection procedures were adapted to pandemic-related constraints. Trained fieldworkers, adhering to safety protocols (use of masks, physical distancing, and sanitization), conducted interviews to mitigate health risks while maintaining data quality.

**Statistical Analysis:**
Software and Techniques:
Data were analysed using Python libraries (Pandas, SciPy, Stats models), chosen for their robust statistical and data handling capabilities. Descriptive statistics, frequency distributions, and cross-tabulations provided initial insights into the socio-demographic and economic profiles.

Inferential Statistics:
1. **Chi-Square Tests:** Used to examine associations between categorical variables such as caste and financial support, family income and educational qualification, or employment status and caste.
2. **ANOVA and Kruskal-Wallis Tests:** Employed to compare continuous or ordinal variables (e.g., wage levels across different caste groups or financial help from SHGs by educational level).
3. **Post-Hoc Analyses:** Following significant results, pairwise comparisons (e.g., examining how specific education levels differed in terms of financial support) provided greater granularity.

Rationale for Method Selection:
The chosen methodologies and analytical tools were well-suited to capture the multi-dimensional aspects of the elderly women's experiences. By integrating both categorical and continuous variables, and employing a range of statistical tests, the study could robustly discern how factors like age, caste, and education intersected with income, employment, and participation in SHGs. This holistic approach ensured that the research could reveal not just broad trends but also the nuanced layers of vulnerability and resilience within the population.

Socio-Demographic Profile of the Elderly Women:
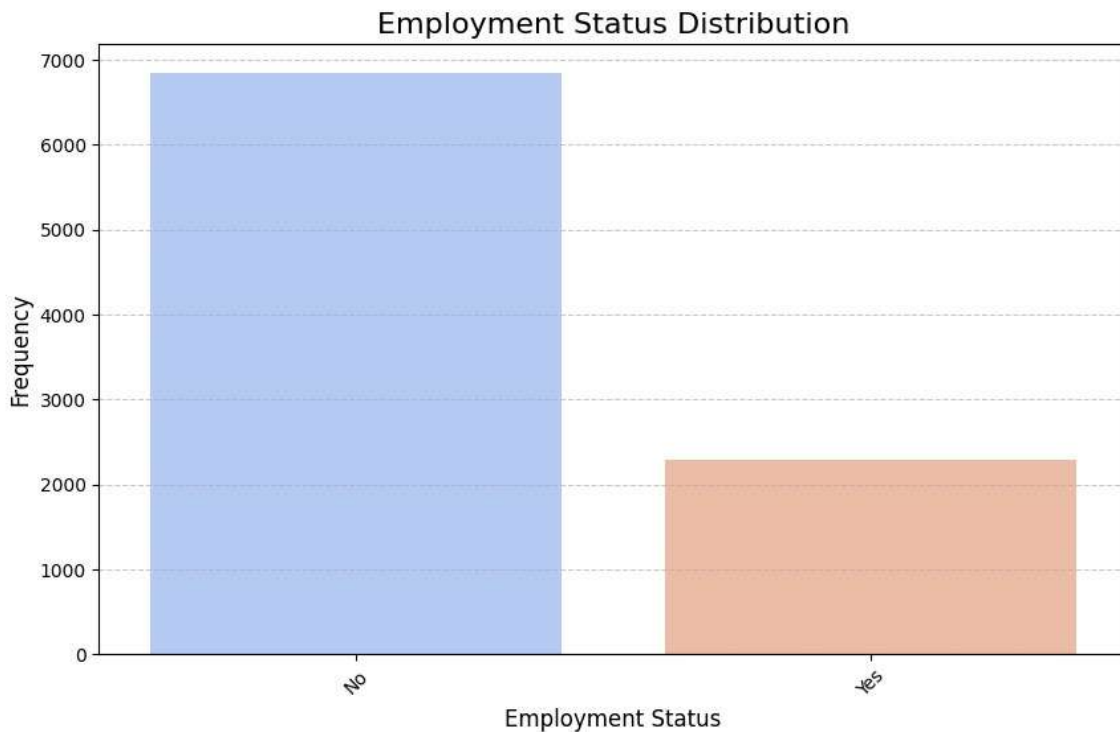
The figure shows the employment status of the women and it can be seen that most of the women surveyed were not employed.

Satisfaction with Financial Support
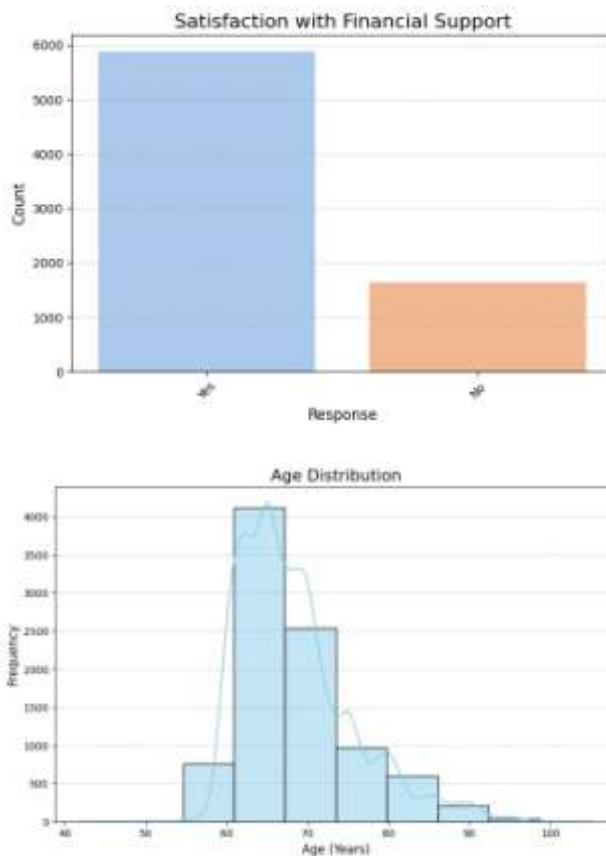
Age Distribution

The figures above show that most of the women surveyed had no social Aadharpension or even family pension.

The figure shows that most of the women surveyed were satisfied with the financial support given by their family.

Age Distribution:
The study targeted elderly women aged 60 years and above. Within the sample of 9,253 respondents, over half (52%) were in the 60–70 age bracket, 34% were aged 70–80, and 14% were 80 years or older. This distribution aligns with India's broader demographic trends, where increasing longevity contributes to a growing cohort of "younger elderly" (60–70 years), who may still engage in income-generating activities, and an expanding segment of the "oldest old" (80+ years), who often face escalating health concerns and heightened dependency.

Older age groups (80+) also reported lower levels of financial support and employment, reflecting an age-related decline in both earning capacity and familial assistance. This calls for greater intervention required for them.

Caste Composition:
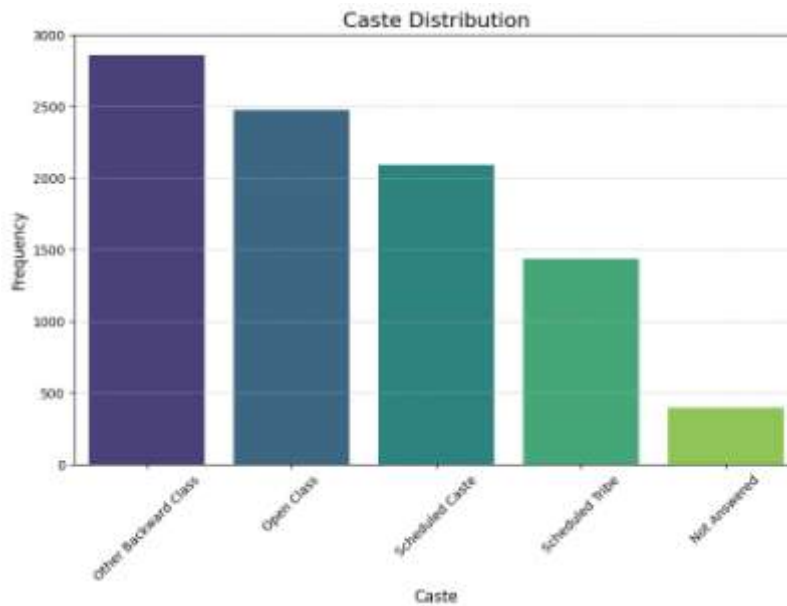
The caste composition included Scheduled Tribes (16%), Scheduled Castes (21%), Other Backward Classes (OBC, 30%), and Open Class (25%). These proportions are vital in understanding the socio-economic hierarchy. Historically marginalized groups, such as Scheduled Tribes and Scheduled Castes, disproportionately occupy lower income brackets and exhibit reduced participation in employment and self-help groups. The data underscore that caste is not just a demographic marker but a strong determinant of socio-economic status and access to resources.

Chi-square tests revealed strong associations between caste and financial outcomes. For instance, Scheduled Castes and Scheduled Tribes were overrepresented in lower-income categories and received less financial support from families in the absence of pensions or personal income.

Educational Status:
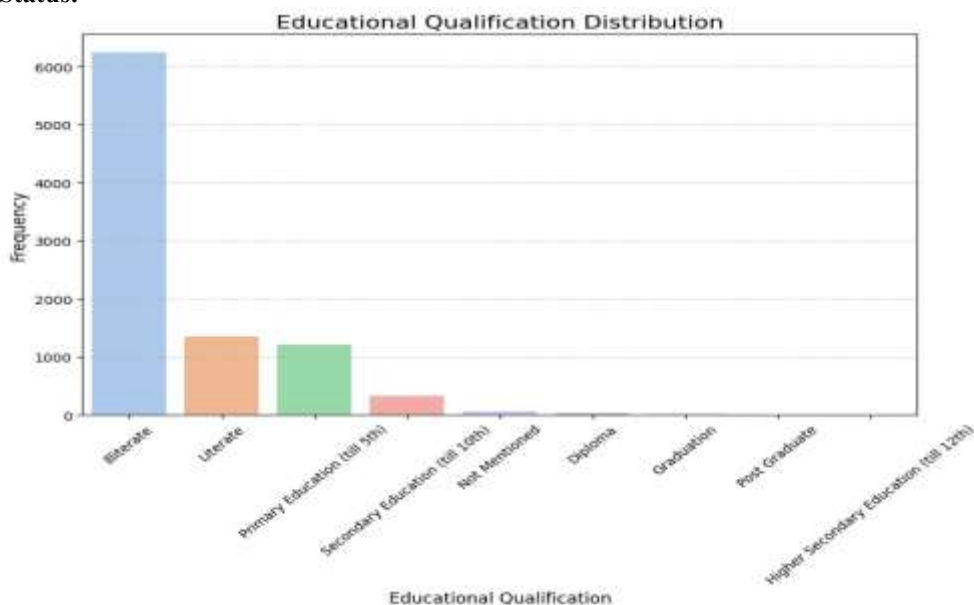
Educational attainment among respondents was generally low. While 34% were illiterate, 25% had primary education, and only 8% attained post-secondary education. Education emerged as a crucial factor in shaping economic prospects. Women with higher education levels generally reported better income levels. This pattern indicates the transformative potential of even basic education in enhancing financial stability and social engagement, particularly in a post-pandemic context where traditional support systems have been strained.

Chi-square tests confirmed a significant association between education and family income (Chi2 = 607.529, p=0.000), as well as education and financial support.

Marital and Household Status: Over half of the respondents were widows, highlighting an added layer of vulnerability. Widowhood frequently means loss of a primary financial provider and limited involvement in decision-making processes within the household. With changing family structures and increased migration of younger generations, many widowed elderly women experience heightened social isolation and reduced family support—conditions worsened by the pandemic's impact on household incomes and care dynamics. Widowhood often correlates with increased financial dependence on extended family or community networks. If these support systems falter, elderly women may find themselves at the intersection of economic hardship and social marginalization.

Financial Status of the Elderly Women in Maharashtra: The average percentage of respondents across all income categories is approximately 16.67%. This indicates a general tendency towards the lower-income categories, as seen from the high percentage in the lowest income group. The median of 16.875% shows that half of the income percentages lie below this value, and half lie above, giving a central tendency of the data that is slightly above the mean. The standard deviation of approximately 9.09% indicates a moderate spread around the mean. The variance of 82.62% shows how much the data is dispersed from the average percentage. The range of 37.54% signifies a wide disparity between the lowest and highest income categories, highlighting the significant difference in income distribution among respondents.
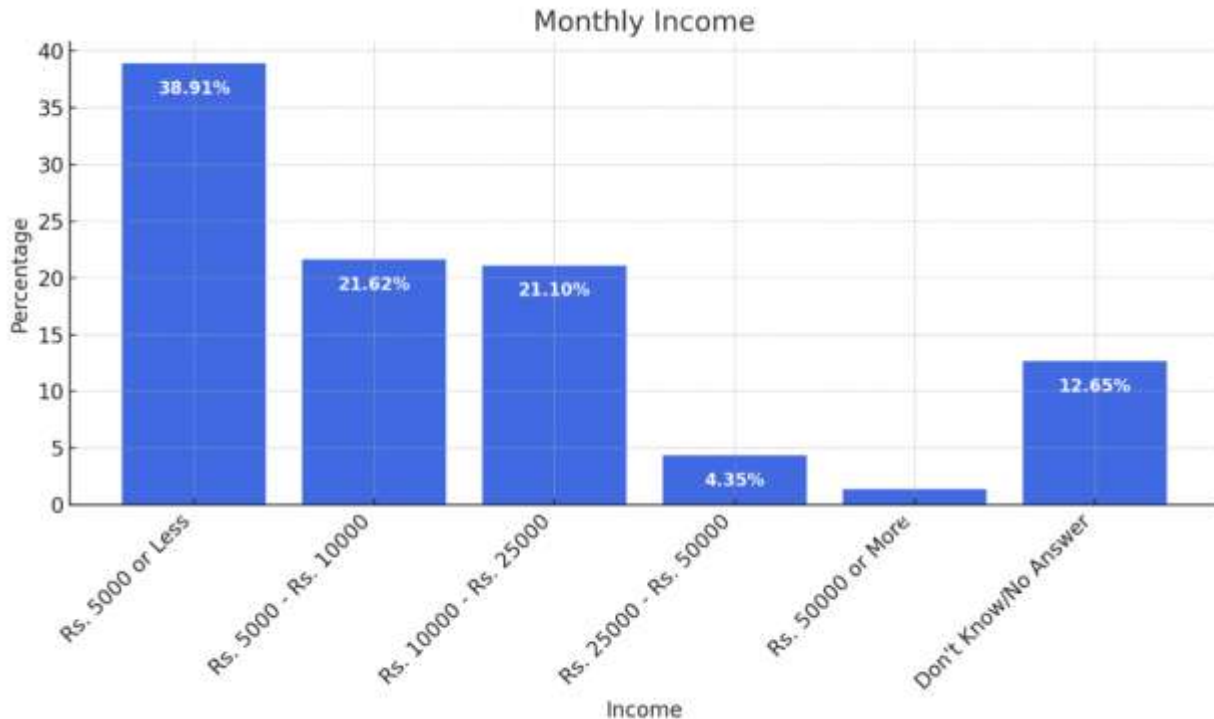
Key Observations:
A significant proportion (38.91%) of respondents fall in the lowest income category (Rs. 5000 or less), suggesting a large portion of the population with very low income. Only a small percentage (1.37%) of respondents fall in the highest income category (Rs. 50000 or more), indicating a limited number of high-income earners. The middle-income groups (Rs. 5000 - Rs. 10000 and Rs. 10000 - Rs. 25000) together constitute about 42.72% of respondents,

showing a considerable segment in these categories. A noticeable percentage (12.65%) of respondents either did not know or did not answer, which may impact the overall analysis.

This statistical analysis provides insights into the income distribution among the respondents, indicating a skewed distribution towards lower income levels with a notable percentage of non-respondents. By addressing these areas, policymakers and social organizations can work towards improving the economic well-being of the population and reducing income disparities.

Influence of Education and Caste on Family Income:
Education:
Chi-square tests revealed a significant correlation between educational attainment and family income (Chi2 = 607.529, p=0.000). Illiterate women were more likely to fall into the lowest income brackets (₹5,000–₹7,500), while those with higher qualifications (Diploma, Graduation, Post-Graduation) were better positioned to access relatively higher income categories. This suggests that even incremental education levels can open pathways to more stable financial conditions. As the education level increases- the % of families with higher income levels increases.
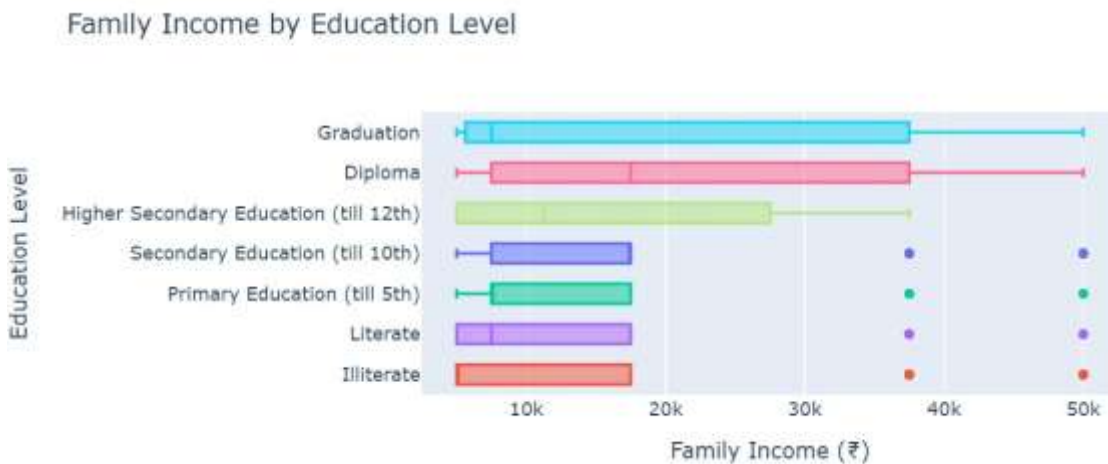
As illustrated in above Figure, the median family income varies by education level with Graduation and Diploma level people having higher family incomes.

Caste:
Family income distributions varied significantly by caste (Chi2 = 213.238, p=0.000). Scheduled Castes and Scheduled Tribes were overrepresented in lower-income brackets, reflecting systemic inequalities and reduced access to higher-paying opportunities. Open Class respondents had a slightly higher presence in moderately better income brackets, aligning with historically greater access to resources.

Caste	Family_Income				
	Below ₹5,000	₹5,000–₹10,000	₹10,000–₹25,000	₹25,000–₹50,000	Above ₹50,000
Not Answered	39.81	25.62	23.46	7.1	4.01
Open Class	37.81	29.35	22.45	7.78	2.61
Other Backward Class	48.82	22	23.94	4.29	0.95
Scheduled Caste	43.69	29.13	22.36	3.41	1.4
Scheduled Tribe	48.94	16.84	29.68	3.6	0.94

As illustrated in above Figure, the median family income varies by caste. OBC and ST women have the highest percentage of families with family income lesser than 5,000 rupees. And open has the most percentage of women with higher family incomes (more than 50,000 rs).

Family Financial Support:
For many elderly women, family support functions as a financial lifeline, particularly in the absence of personal income or pensions. On average, about 75% reported receiving some degree of financial assistance from their families, although this share decreases with age and varies substantially by both caste and education.
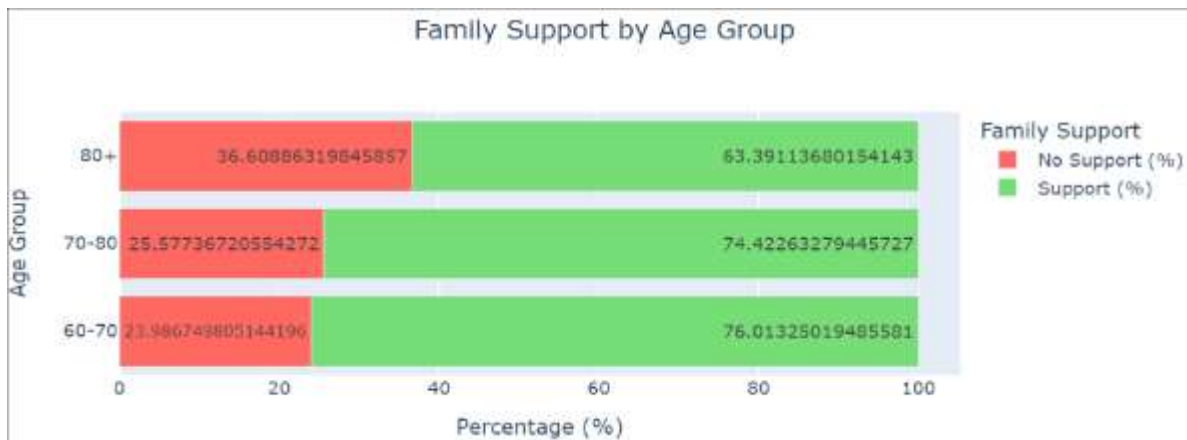
Caste and Family Support:
- Chi-square analysis (including all data: Chi2 = 131.595, p=0.000; excluding "Not Answered": Chi2 = 27.642, p=0.000) confirmed a significant association between caste and whether the family provides financial support. Scheduled Castes faced greater difficulty securing consistent family-based assistance, hinting at more fragile intergenerational support systems. But Scheduled tribes had the highest amount of people with family support. This may hint at more complex value systems that lie beneath this.


Family Support by Caste
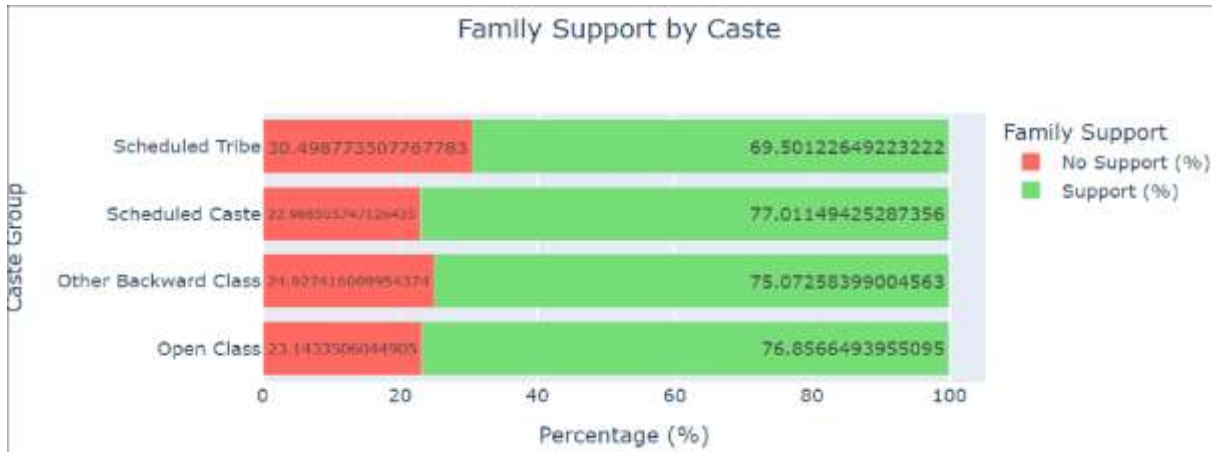
Age and Family Support:
- While younger elderly groups (60–70 years) reported the highest levels of familial assistance (76%), support declined to 74% for those aged 70–80 and plunged to 63% in the 80+ bracket (Chi2 = 40.028, p=0.000). This trend reflects a possible erosion of reciprocal care within families as the physical and economic demands of supporting older relatives increase with advancing age, and household resources are stretched thinner—especially in the pandemic's aftermath.

Family Support by Age Group

Education and Family Support:
- Educational qualifications also significantly impacted the likelihood of receiving financial support from family (Chi2 = 44.367, p=0.000). Comparisons revealed that lesser educated women often depended more on family, while those with higher education levels showed slightly reduced dependence, suggesting that better-educated women may tap alternative income streams or navigate welfare schemes more effectively. However, women with primary

education also broke the trend and had the lowest percentage of women with family support. So this relationship may not be as straightforward as we expect it to be.
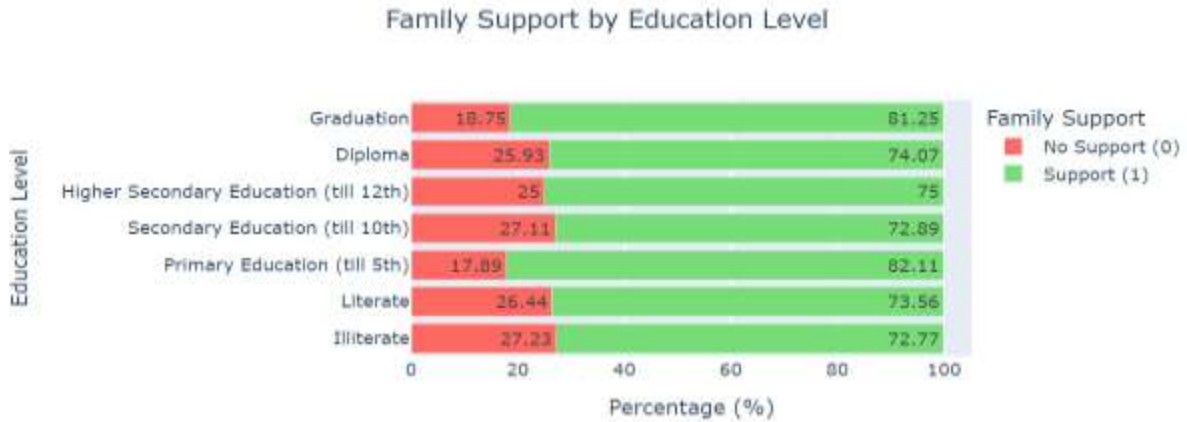

Employment Status and Earnings
Employment Rates:
Only 22% of respondents reported being employed, with the vast majority engaging in low-paying, labour-intensive activities such as agricultural work. Employment rates declined sharply with age—27.29% in the 60–70 age group versus just 10.14% among those 80+. Employment was also strongly associated with caste and educational attainment (Chi2 for Caste = 148.443, p=0.000; Chi2 for Education = 53.503, p=0.000), illustrating that systemic inequities and skill deficits limit upward mobility and economic agency for many elderly women.

Wage Differences:
While ANOVA tests showed that wages did not differ significantly by caste (F=2.019, p=0.089) or age (F=2.264, p=0.104), education did emerge as a significant factor (F=10.319, p=0.000). However, because of the low participation of postgraduates there was no clear trend that higher education fetched higher wages. The pandemic's ripple effects—such as market closures and reduced labour demand— may have further constrained these women's capacity to secure stable, dignified employment.
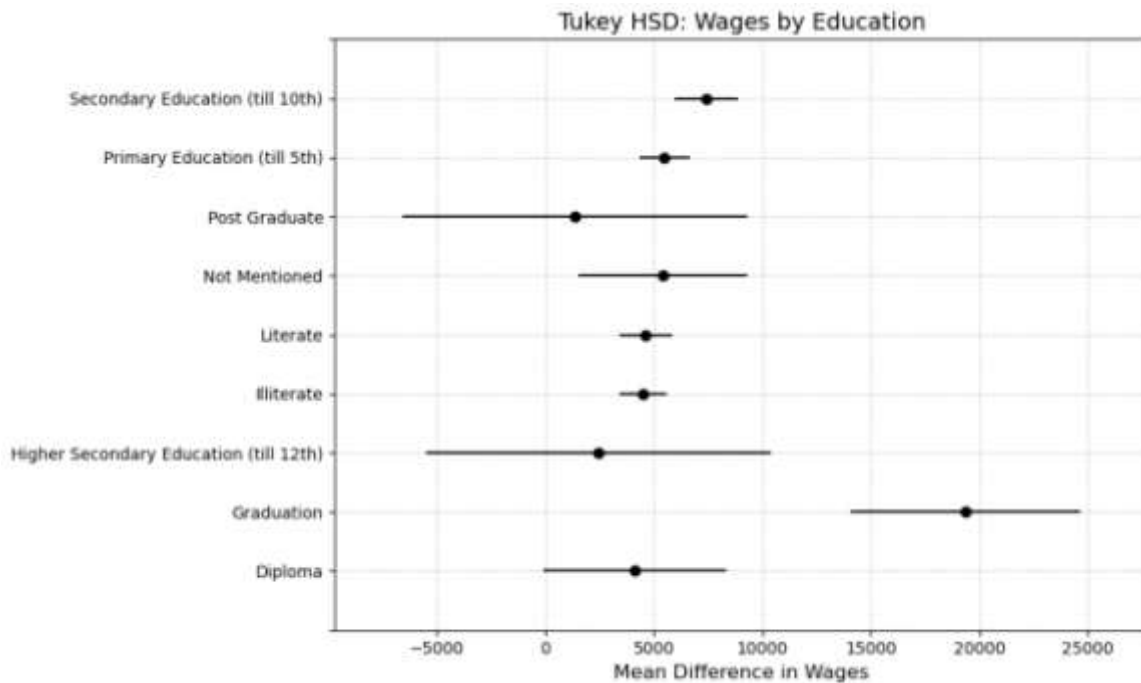
As the above figure demonstrates, Graduates fetched the highest wages by far although the overall earning levels remained modest. And as the education level increased the variability of wages increased. However, there is no clear trend linking higher wages with higher wages. However, we must keep in mind that older women may not want to work at all unless circumstances force them.

Pension Coverage:
Pension schemes, including Social Aadhar, represent an essential income buffer for elderly women lacking personal savings. However, coverage remained low, with just 38% receiving any pension. While pensions offer a baseline safety net, their amounts and reach remain limited. Ensuring wider coverage and increasing pension amounts could play a vital role in mitigating economic insecurity, especially for the oldest and most marginalized segments of the population.

Self-Help Groups and Financial Support Networks
Self-Help Groups (SHGs) can empower elderly women by providing access to credit, fostering social solidarity, and building financial literacy. However, overall participation hovered at around 10% and was strongly influenced by caste, education, and age. Older women had substantially lower participation rates. Open class and more educated individuals (anyone who went for formal education) were more likely to join SHGs, thereby gaining a platform to supplement their incomes or seek financial help. Caste-based disparities in SHG participation (Chi2 = 149.340, p=0.000) and financial support (ANOVA: F=8.006, p=0.000) highlight the need for inclusive outreach strategies targeting those who stand to benefit most but remain outside these networks.

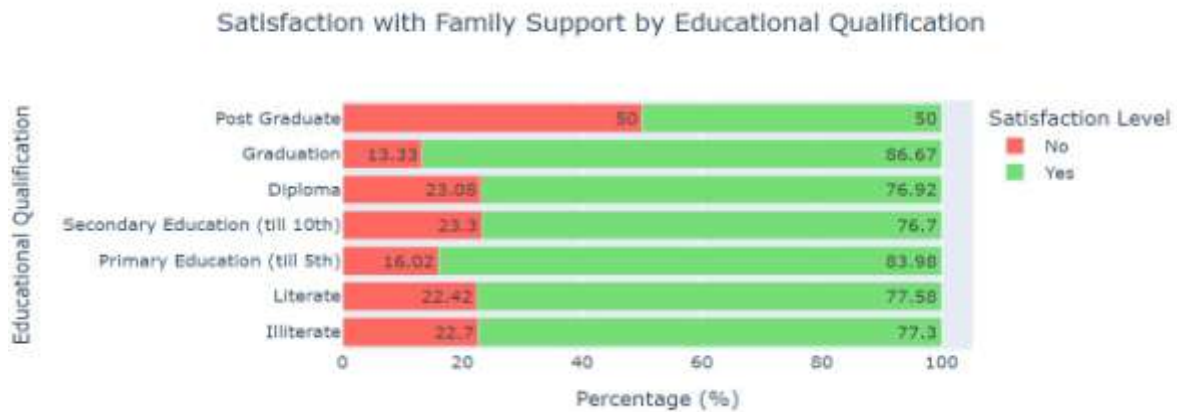Self-Help Group Participation by Educational Qualification
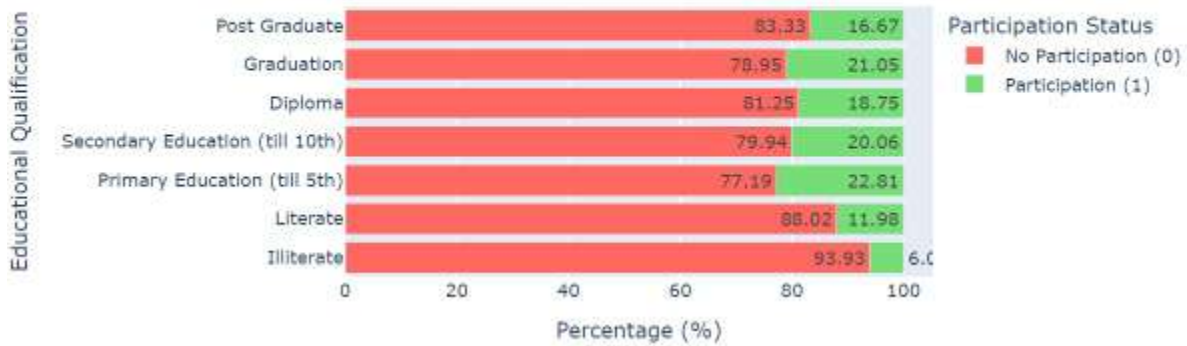
As illustrated in the above Figure, the Self-help group participation varies by education level, with Literates and Illiterates receiving comparatively lower rates. Hence these individuals would not get an additional platform to supplement their income.
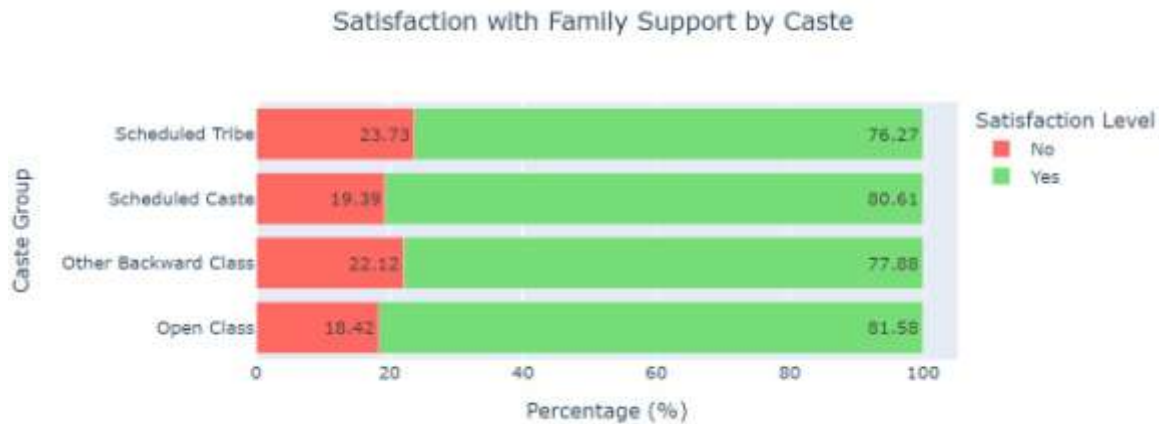

Financial Help Amount by Caste
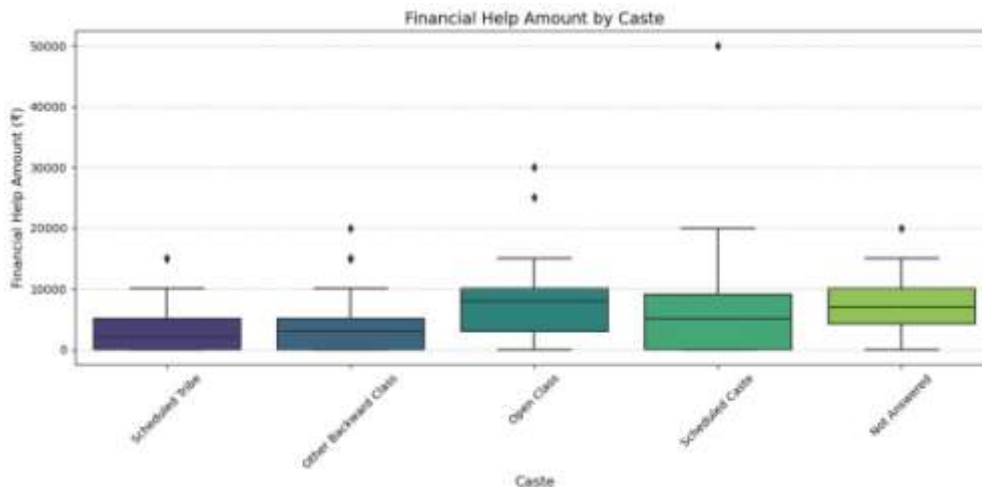
As illustrated in above Figure, the median financial help amount varies by caste group, with Scheduled Tribes and Other Backward Classes receiving comparatively lower amounts. This visualization supports the statistical findings that marginalized communities face greater economic constraints.

Satisfaction with Family Support:

While financial assistance from families is integral to many elderly women's livelihoods, satisfaction levels vary by both education (Chi2 = 31.768, p=0.000) and caste (Chi2 = 138.766, p=0.000). For instance, satisfaction with family support reached 100% among those with higher secondary education compared to 50% among postgraduates, indicating that expectations and standards for adequate support may rise with education. Similarly, satisfaction levels were higher among Open Class (81.58%) and Scheduled Castes (80.61%), reflecting nuanced social dynamics and possibly differing benchmarks for evaluating familial contributions.

Satisfaction with Family Support by Educational Qualification

Educational Qualification	No	Yes
Post Graduate	50	50
Graduation	13.33	86.67
Diploma	23.08	76.92
Secondary Education (till 10th)	23.3	76.7
Primary Education (till 5th)	16.02	83.98
Literate	22.42	77.58
Illiterate	22.7	77.3

As illustrated in above Figure, the satisfaction with family support varies by education status, with Post Graduates being significantly more dissatisfied. It points to higher expectations. But we must keep in mind post graduates are highly underrepresented in the older women. Hence, we have too few observations to make any strong statements about this.

Satisfaction with Family Support by Caste

Caste Group	No	Yes
Scheduled Tribe	23.73	76.27
Scheduled Caste	19.39	80.61
Other Backward Class	22.12	77.88
Open Class	18.42	81.58

As illustrated in above Figure, the satisfaction with family support varies bycaste, with Scheduled Tribes and Other Backward Classes being significantly more dissatisfied. Open and Scheduled Castes are more satisfied pointing to nuanced social dynamics.

Findings:

The analysis of socio-demographic and financial parameters among rural elderly women in Maharashtra reveals a complex interplay of age, caste, education, employment, and financial support mechanisms. These elements do not exist in isolation; rather, they collectively shape the economic landscape and overall well-being of this vulnerable demographic, especially in a post-COVID-19 environment marked by heightened uncertainty and social isolation.
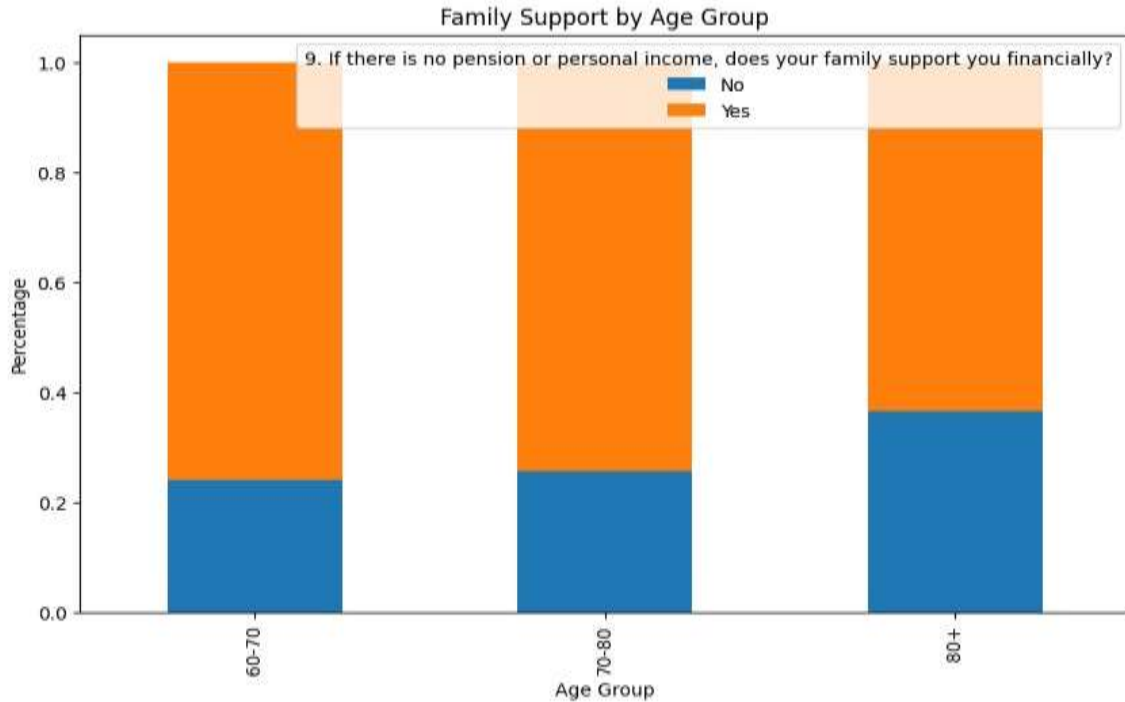
Figure visually demonstrates the decline in family-based financial support as age increases. While the majority of 60–70-year-olds receive family assistance, this proportion diminishes among the 80+ cohort, corroborating the statistical trends previously noted.

Key Observations
Significant Socio-Demographic Disparities:
○**Age-Related Vulnerabilities:**
With 52% of respondents aged 60–70, this "younger elderly" cohort had a higher employment rate and higher levels of family support on average. However, these advantages diminished markedly among older groups. Women 80+ years faced pronounced financial dependency as most of them were not employed, and lower familial assistance, underscoring that advancing age intensifies economic strain and social isolation.

○**Caste-Based Inequalities:**
The data consistently showed that Scheduled Castes and Scheduled Tribes struggled with the lowest incomes and least stable forms of support. Conversely, Open Class respondents, though not uniformly affluent, were more likely to secure moderate income brackets and exhibit higher satisfaction with family support. This pattern highlights enduring structural inequities that perpetuate economic disadvantage among historically marginalized groups.

○**Education as an Economic Lever:**
Education emerged as a critical differentiator. Even rudimentary levels of literacy correlated with better employment prospects, increased likelihood of joining Self-Help Groups (SHGs), and access to slightly higher wage levels. Among illiterate women, financial dependency and low family incomes were prevalent. In contrast, those with secondary or higher education displayed reduced reliance on family support, improved economic resilience, and a greater sense of satisfaction regarding their financial circumstances.

Family Support and Its Limitations:
While family support remains a cornerstone of survival strategies, its reliability is uneven. Age and caste influenced whether families provided financial help when personal income or pensions were absent. Younger elderly groups and women from relatively privileged castes received more consistent familial aid. Yet, as women aged, this support tended to wane—a finding particularly alarming given the rising healthcare and daily living costs that accompany older age.

Constrained Employment Opportunities:
Employment participation was a modest 22% overall, with most engagements confined to low-wage agricultural labour. The stark decline in employment rates among the oldest age groups, combined with limited wage differentials by caste or age, underscores the systemic barriers preventing older women from achieving even minimal economic autonomy. Educational attainment offered a modest wage advantage, but the overall landscape remained challenging, especially under pandemic-induced market disruptions.

Patchy Coverage of Social Safety Nets:
Pensions and SHGs represent potential avenues for reducing financial vulnerability.

However, only 38% had pension coverage, and just 10% participated in SHGs. Marginalized castes and less educated women were notably underrepresented in these protective mechanisms. When SHGs and pensions did deliver benefits, they often reinforced the positive effects of education and caste advantage rather than bridging the gaps for the most disadvantaged.

Varying Levels of Satisfaction and Well-Being:
Satisfaction with family support and the overall sense of financial security varied widely. Differences by caste and education suggest that social identity not only affects material conditions but also shapes perceptions of adequacy and fairness. Women who had achieved even moderate educational qualifications tended to have higher expectations—and often greater dissatisfaction—if their needs were not met, while those with minimal schooling sometimes reported higher contentment with modest support, possibly reflecting differing normative standards or adaptive coping mechanisms.
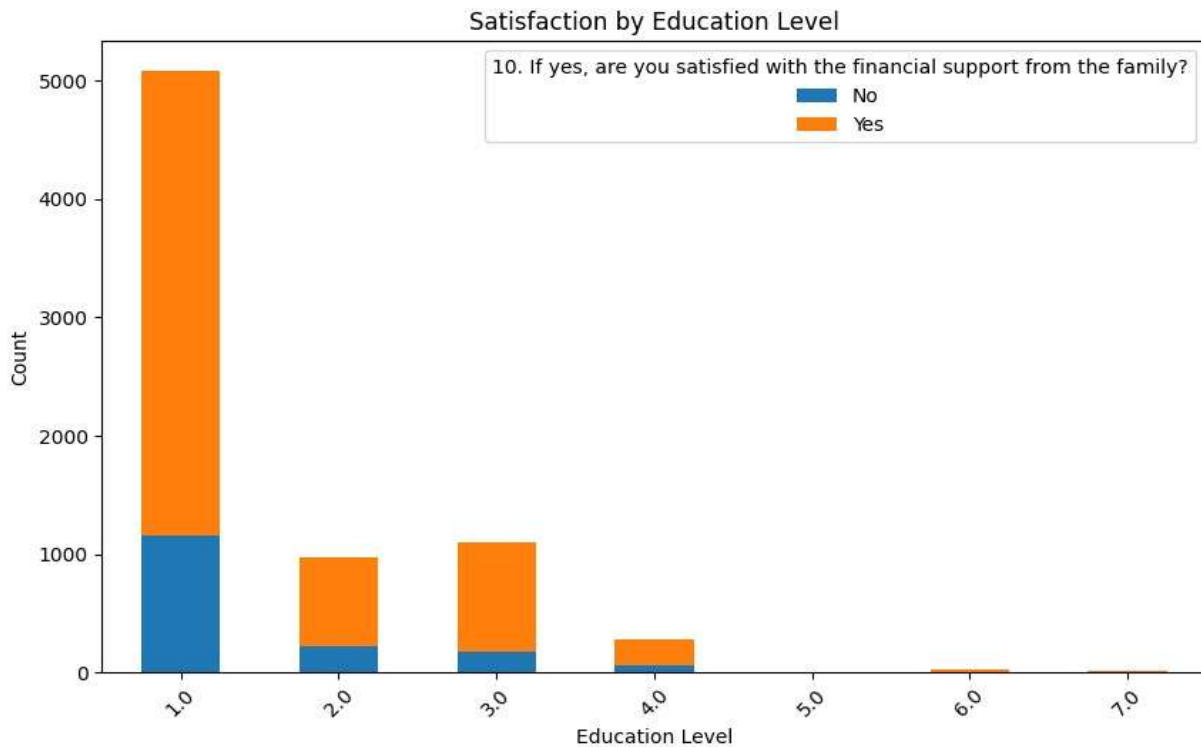

Figure shows a clear relationship between education and satisfaction with family support. While less-educated women appear satisfied with modest financial help, those with secondary or higher education hold different expectations, influencing their reported satisfaction levels.

Integrated Insights
Collectively, these findings present a portrait of elderly rural women in Maharashtra whose economic lives are constrained by intersecting factors of caste, education, and age. The COVID-19 pandemic exacerbated pre-existing vulnerabilities, straining already fragile family safety nets, limiting employment opportunities, and intensifying

social isolation. While some measures—like pensions, SHGs, and educational interventions—offer pathways toward improvement, their uneven uptake and limited reach mean that many elderly women remain locked in cycles of dependency and insecurity.

These realities underscore the need for multi-layered interventions that acknowledge the complexity of socio-demographic determinants. Addressing structural inequalities linked to caste, investing in adult education and skill development programs, expanding coverage of pension schemes, and promoting more inclusive SHG policies can create more resilient support systems. In doing so, policymakers and stakeholders can help these women navigate the uncertainties of late life with greater dignity, autonomy, and financial stability.

Economic Dependence and Income Sources
Economic dependence among rural elderly women in Maharashtra emerges as a multifaceted issue, influenced by a matrix of socio-demographic variables and exacerbated by the post-COVID environment. While some women sustain themselves through personal earnings, pensions, or self-help group engagements, many remain reliant on family members and community networks—especially when their own sources of income are limited or absent.
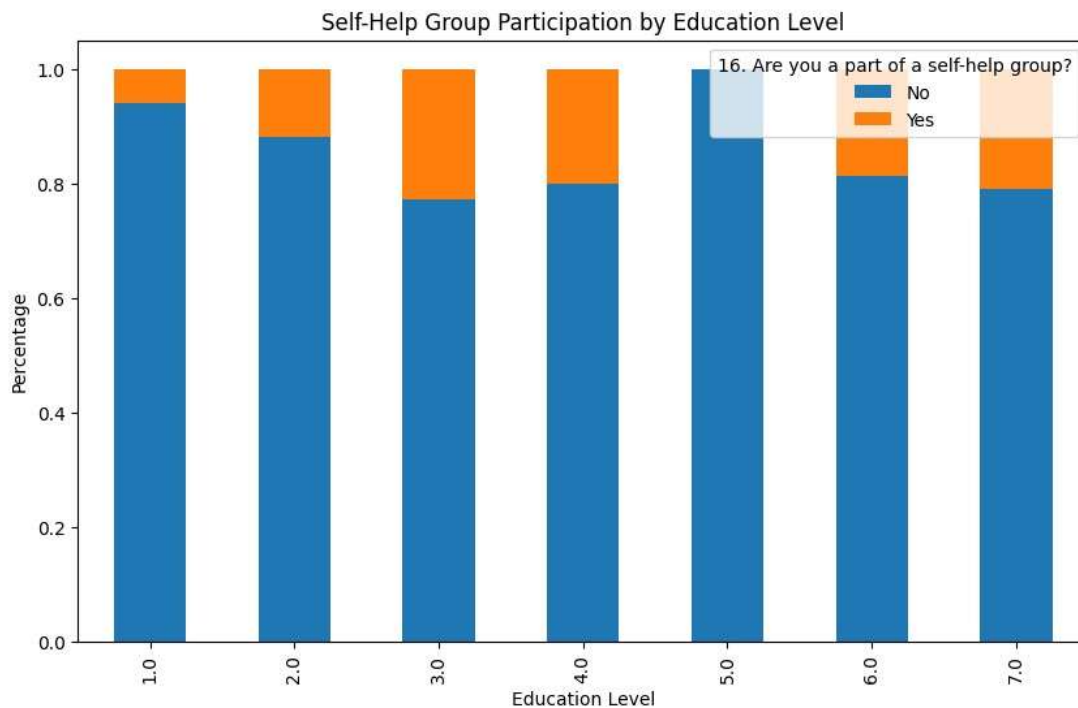
As shown in Figure, SHG participation rates increase with educational attainment. Illiterate women exhibit minimal engagement, while those with higher education levels are more likely to leverage SHGs as financial and social support mechanisms.

The Nature of Economic Dependence
Family as the Primary Support Mechanism:
A significant majority of respondents reported that, in the absence of personal income or formal pensions, their families provided financial aid. However, the extent and consistency of this support varied considerably. Age played a pivotal role; younger elderly women (60–70 years) experienced higher rates of family support, while those aged 80+ were increasingly left without reliable assistance. Caste and education also shaped this dependency, with historically marginalized groups (Scheduled Tribes and Scheduled Castes) and illiterate women finding themselves in more precarious positions.

Over-Reliance on Low-Wage Labor:
For the 22% of respondents who were employed, agricultural labour dominated as a source of income. This labour, however, is often seasonal, physically demanding, and low-paying, offering little by way of long-term security.

With advancing age, women's capacity to continue working in physically strenuous jobs diminishes, further tightening the grip of economic dependence. The pandemic's detrimental impact on rural labour markets—such as disruptions in supply chains and reduced farm gate prices—compounded these vulnerabilities.

Pension Schemes as Partial Buffers:
Pensions can mitigate some financial uncertainties, yet only 38% of the surveyed women received pension benefits. While these benefits provide a critical baseline income, their limited coverage and modest amounts mean that pensions seldom suffice as a standalone security measure. This is particularly salient for older women, who, facing compounding health expenses and reduced family contributions, find that their pensions fall short of meeting basic needs. Better targeting, streamlined access, and increased pension amounts could enhance their role as a stabilizing force.

Income Sources Beyond Wages and Pensions
Self-Help Groups (SHGs):
Participation in SHGs—though limited to about 10% of respondents—offers potential pathways out of economic fragility. SHGs can provide microcredit, foster community cohesion, and encourage small-scale entrepreneurial activities. Education and caste significantly influenced who joined these groups. More educated women and those from relatively advantaged caste backgrounds were likelier to leverage SHGs to supplement their income, while marginalized groups and the oldest cohorts remained on the periphery. Expanding SHGs to reach these underserved segments could gradually lessen economic dependence.

Non-Farm Activities and Informal Enterprises:
While less common, some respondents engaged in small-scale trading, handicraft production, or animal husbandry to diversify income streams. These informal enterprises were most feasible among women with some level of literacy and better mobility. However, the success of such ventures often hinges on local market conditions, access to credit, and supportive social networks—factors not uniformly available to all women.

Community and Religious Trusts, Philanthropic Aid:
A minority relied on ad-hoc forms of support from community or religious trusts and philanthropic organizations, especially during the pandemic's peak. Although not systematic or guaranteed, such assistance occasionally bridged financial gaps. Enhancing partnerships between local NGOs, community-based organizations, and government agencies could formalize these sporadic supports and create more reliable safety nets.

Implications of Economic Dependence:
The patterns of dependence, employment, and supplementary income streams highlight structural impediments hindering women's financial autonomy. For many elderly women, the absence of personal savings, the decline in earning capacity with age, and the inconsistent availability of pensions or family support result in chronic vulnerability. Without meaningful intervention, economic dependence can erode self-esteem, limit healthcare access, and reduce overall quality of life.

The data call for strategic efforts to diversify income sources and strengthen the resilience of elderly women. Improving access to financial literacy programs, expanding SHG participation to marginalized communities, increasing pension coverage and amounts, and encouraging skill-based training—particularly for the younger elderly—can mitigate the intensity of economic dependence. Ultimately, tackling the root causes of dependence, rather than merely treating its symptoms, requires holistic and well-coordinated policy responses.

Social Identity and Economic Disparities:
The financial well-being of elderly women in rural Maharashtra is not merely a function of age or education level. Social identity—shaped profoundly by caste and other historically entrenched hierarchies—plays an equally critical role in determining who gains access to resources, who secures stable employment, and who receives dependable support. Education, while offering some upward mobility, also intersects with caste, influencing how effectively women can leverage their skills, networks, and knowledge to improve their circumstances.
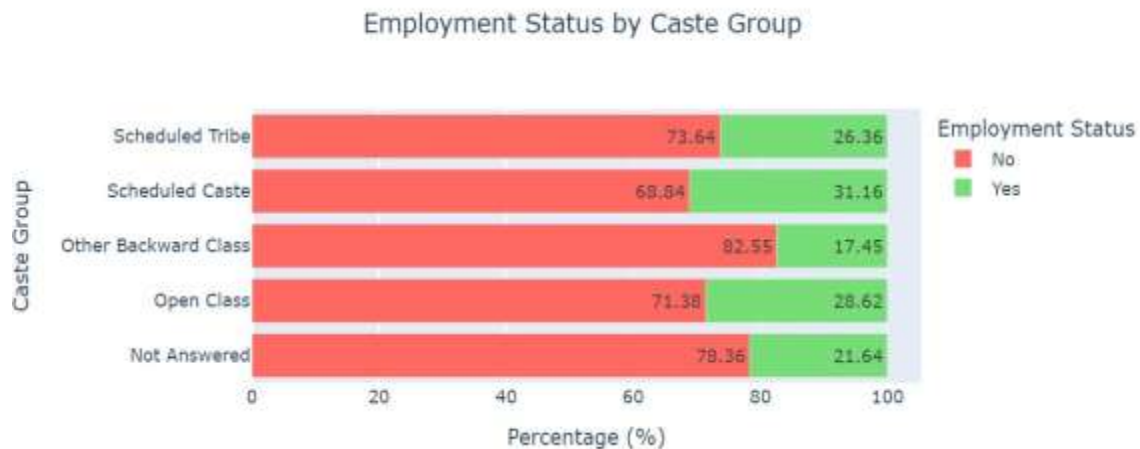
Caste as a Structural Determinant:
Income Inequalities Across Caste Lines:
Scheduled Tribes and Scheduled Castes consistently appeared at the lowest rungs of the income ladder, while Open Class respondents had comparatively better, though not uniformly strong, financial standings. Chi-square analyses confirmed caste-based disparities in both family income (Chi2 = 213.238, p=0.000) and financial support. Lower incomes in marginalized caste groups reflect long-standing structural inequalities—such as limited access to education, credit, and land ownership—that stifle the economic advancement of these communities.

Restricted Employment Opportunities:
Employment patterns underscored these inequities. Scheduled Castes and Open Class individuals showed higher employment percentages (31.16% and 28.62%, respectively) compared to Other Backward Classes (17.45%) and Scheduled Tribes (26.36%). This disparity points to differing degrees of social capital and networks that can help in securing work, even if wages remain modest. Caste-based discrimination, albeit often subtle, can manifest in hiring biases, wage negotiations, and opportunities for upskilling or moving into less physically taxing roles.

Employment Status by Caste Group

Caste Group	No (%)	Yes (%)
Scheduled Tribe	73.64	26.36
Scheduled Caste	68.84	31.16
Other Backward Class	82.55	17.45
Open Class	71.38	28.62
Not Answered	78.36	21.64

Above table highlights the variation in wage-based employment across caste groups. Scheduled Castes exhibit a relatively higher employment rate (31.16%), whereas Other Backward Classes have notably lower participation in wage labour (17.45%), reinforcing the role of social identity in economic engagement

Gaps in Self-Help Group Participation and Benefits:
Self-Help Groups (SHGs) can offer financial relief and a measure of autonomy. However, caste profoundly shaped who gained entry into these empowering networks. With participation rates as low as 5.40% among Scheduled Tribes and up to 14.86% among the Open Class, these variations highlight how existing social power dynamics affect access to collective financial mechanisms. Even when marginalized caste members join SHGs, they often receive fewer financial benefits on average, indicating that mere inclusion does not guarantee equal treatment or resource allocation.

The Role of Education in Mitigating Disparities:
Education as a Buffer:
While no single intervention can eradicate centuries-old inequalities, education emerged as a partial counterweight to caste-based disadvantages. Women with higher levels of education reported better chances of employment and higher wages (ANOVA: F=10.319, p=0.000), even if these gains were incremental. Education provided a platform to understand government schemes, negotiate wages, or seek alternative livelihoods—steps that can gradually chip away at caste-imposed ceilings.

Differential Outcomes Based on Intersectionality:
The interplay between caste and education is complex. For an illiterate woman from a Scheduled Tribe, the absence of educational credentials compounds the barriers posed by her social identity. In contrast, a similarly situated woman who has attained at least primary or secondary education may navigate financial challenges more effectively, identify avenues for income diversification, or demand fairer terms from employers. Still, while

education can serve as a catalyst for change, the pace and scale of its impact are tempered by entrenched social norms and institutional biases.

Consequences for Satisfaction and Well-Being:
Economic disparities rooted in caste and attenuated by educational attainment influence not just material outcomes but also subjective well-being. For instance, the higher satisfaction reported by certain caste groups could reflect either relatively better economic conditions or differing benchmarks for what constitutes "adequate" support. Meanwhile, more educated women—especially those who understand their entitlements or have been exposed to broader socio-economic opportunities—may hold higher expectations, leading to a more critical assessment of their family's financial support or government provisions.

Policy Recommendations:-
Expand and Strengthen Social Safety Nets:
Enhanced Pension Coverage and Amounts:
Broaden eligibility criteria, streamline access, and increase pension amounts to provide a more substantial and reliable income base, particularly benefiting those over 80 and from marginalized castes.

Targeted Subsidies and Income Support:
Introduce caste- and age-sensitive subsidies, ensuring that the most disadvantaged groups have guaranteed baseline support independent of fluctuating family finances.

Promote Inclusive Self-Help Groups (SHGs):
Focused Outreach to Marginalized Groups:
Actively recruit Scheduled Tribes, Scheduled Castes, and older women into SHGs. Provide mentoring, capacity-building workshops, and culturally tailored literacy programs to ensure they can effectively participate and benefit.

Strengthen Financial Literacy and Market Linkages:
Equip SHG members with basic financial skills and connect them to buyers, cooperatives, or digital marketplaces, enabling them to earn more stable and competitive incomes.

Invest in Adult Education and Skill Development:
Literacy and Lifelong Learning Initiatives:
Offer flexible, community-based literacy classes and vocational training designed for older adults. Improve digital literacy so that elderly women can access government schemes, banking services, and telemedicine platforms.

Tailored Skill Building:
Focus on crafts, light manufacturing, or service-based tasks suited to older adults, enabling them to continue earning in less physically demanding ways.

Design Age-Sensitive Employment Opportunities:
Public-Private Partnerships:
Collaborate with local industries, NGOs, and government agencies to create lighter, age-appropriate employment avenues. For instance, cottage industries or small-scale food processing units can allow older women to contribute economically without overexertion.

Flexible Work Schedules and Home-Based Opportunities:
Encourage part-time or home-based roles to accommodate the health limitations that come with age, maintaining elderly women's dignity and agency.

Strengthen Community Support and Healthcare Access:
Integrated Healthcare and Counselling Services:
Develop community-level health camps and counselling sessions to address mental health and chronic illnesses, acknowledging that financial well-being and health are closely intertwined.

Local Support Networks:
Partner with local self-governing bodies and religious/community trusts to formalize informal aid channels, ensuring more consistent access to emergency financial help and emotional support.

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