

Status of Elderly People in Chandragiri Municipality of Kathmandu

Keshab Parajuli¹ Dipendra Bikram Sijapati² Manamaya Mishra³

1. Department of Public Health, Asian College for Advance Studies, Purbanchal University, Nepal. ksabparajuli@gmail.com

2. Department of Population Studies, Patan Multiple Campus, TU, sijapatidipendra@gmail.com

3. Department of Population Studies, Patan Multiple Campus, TU, manishra4@gmail.com

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Abstract

This paper is based on the title "Status of Elderly People in Chandragiri Municipality, Kathmandu District." Ageing is a natural phenomenon that carries a higher risk of a variety of physical and psychological difficulties compared to other age groups. The objective of this paper is to assess the health and socio-economic status of elderly people. A descriptive and cross-sectional research design was conducted among respondents aged 60 and above, using a semi-structured questionnaire through an interview schedule. The study area was selected using purposive sampling methods, focusing on wards 10, 12, and 14, with 422 respondents selected through simple random sampling from a total population of individuals aged 60 and above across 15 wards. This study analyzed demographic and socio-economic data from 422 individuals aged 60 to 90 years. Data were analyzed using the chi-square test to show the relationship between study variables. In the younger age group (60-75), females (75.3%) and Hindus (82.5%) were predominant. Financially, 74.6 percent had no bank balance, and 86.3 percent lacked ornaments. In terms of health, 34.4 percent had diabetes, and 84.8 percent reported some health issues. Interestingly, asset ownership (house, land, ornaments, and investments) did not significantly correlate with health problems, emphasizing the need for broader exploration of health determinants. In conclusion, the analysis sheds light on various demographic factors influencing the lives of elderly respondents. Gender, age, religion, caste, income sources, caretaker preferences, daily habits, and health perceptions were explored.

Keywords: Elderly People, Health Status, Socio-economic, Status, Well-being.

Introduction

Aging is an inevitable and multifaceted process that begins at conception and continues throughout life. This natural progression leads to various changes that can impact an individual's ability to function optimally within their environment. Factors influencing aging encompass a broad spectrum, including genetics, diet, mental attitude, environmental conditions, and socioeconomic status (Paudel, 2022). Globally, there has been a marked increase in the elderly population, a demographic shift attributed to a combination of declining fertility rates and advancements in healthcare, leading to increased longevity (Paudel, 2022). The aging population poses significant social and economic challenges. Many seniors face limited access to resources and income-generating opportunities, which can lead to poverty and social exclusion. These factors not only threaten the well-being of senior citizens but also strain familial and societal support systems (Aryal, 2012).

Recognizing these challenges, the Government of Nepal has implemented various policies, programs, and initiatives aimed at supporting the elderly population. These include family-based security systems, non-contributory social pensions, and privileges in areas such as healthcare services (Aryal, 2012). However, the effectiveness and impact of these interventions on improving the quality of life of elderly individuals remain areas warranting further exploration. The concept of quality of life (QOL) is pivotal when assessing the well-being of the elderly population. Aging can directly and indirectly affect QOL, with socio-economic variables playing a crucial role. Socioeconomic challenges faced by seniors, such as poverty and limited access to healthcare and social services, can exacerbate physical health issues and negatively impact overall well-being (Santhalingam, 2022).

Nearly 10 percent of the world population consists of senior citizens aged 60 years and over. Among the 15 countries currently with more than 10 million older people, seven are developing countries. By 2020, there were 1 billion elderly people (over 60 years) worldwide. By 2030, there will be more people over 60 than under 15. In 2050, 30 percent of the population in 64 countries will consist of senior citizens over 60 years old. For the first time in history, the elderly will outnumber children under 14. Eighty percent of these individuals will be in developing countries, where the aging population is growing rapidly. By the middle of this century, Asia's elderly population is projected to be 17.5 percent of the total population, up from 4.1 percent in 1950. Asia accounted for only 44 percent of the world's elderly population in 1950, but this is expected to increase to 62 percent by 2050 (Acharya, 2021).

The research question of this article is: What is the health and socio-economic status of elderly people in Chandragiri Municipality, and what is the situation regarding the economic and social status of this area? The general objective is to assess the health and socio-economic status of elderly people in Chandragiri Municipality's wards 10, 12, and 14. The specific objectives are to examine the association between socio-demographic variables and health status and to investigate the association between socio-demographic variables and socio-economic status. The research design for this study was descriptive cross-sectional; therefore, the timing of the snapshot is not guaranteed to be representative and is conducted in a specific geographical area, which limits generalizability to the country as a whole. Data on health problems were collected based on the respondents' self-reporting, so there may be a chance of recall bias and social desirability bias.

Methodology

This paper employed a descriptive cross-sectional method to assess the socio-economic status and general health of senior citizens in Chandragiri Municipality, collecting data using a semi-structured questionnaire through an interview schedule. According to the 2021 census, 10.2 percent of the population is elderly, with 4.3 percent aged 70 years and above. Similarly, there are 6,897 individuals aged 65 and above in the total population. The study area was selected using purposive sampling, focusing on wards 10, 12, and 14, with 422 respondents selected through simple random sampling from a total population of 855 individuals aged 60 and above in Chandragiri Municipality (222, 330, and 303 from each ward, respectively). This paper analyzed demographic and socio-economic data from 422 individuals aged 60 to 90 years using cross-tabulation and chi-square tests to describe the relationships between study variables.

Based on a prior study conducted in Nepal, the prevalence of older persons with specific physical health issues was determined to be 50 percent, with a margin of error of 5% and a confidence level of 95% ($Z=1.96$). The sample size was calculated using the formula: $n = (Z^2pq) / d^2$ (Charan, 2013). Therefore, 422 is the sample size for the study.

The starting point for household selection within each ward was determined by spinning a pen at the city center. Within each household, one participant was selected; if multiple eligible participants were present, a lottery method was employed for random selection, ensuring fairness and minimizing bias. Primary data were collected through face-to-face interviews using a semi-structured questionnaire designed specifically for this study. The questionnaire was formulated after a comprehensive literature review, consultations with research experts, and a pre-testing phase with 10% of the target population to ensure clarity and relevance. It was translated from English to Nepali and back to English to maintain accuracy. Prior to data collection, ethical approval was obtained from Patan Multiple College, and permission was secured from Chandragiri Municipality. All

participants were provided with detailed information about the study's purpose, processes, and objectives. Written informed consent was obtained from each participant to protect their autonomy and dignity. Data entry, modification, and verification were performed using Epi-data version 4.6. The cleaned data were imported into SPSS for further analysis. Various statistical techniques were applied, and cross-tabulation and chi-square tests were utilized to determine the statistical significance of these relationships. The findings were presented using tables, detailing frequencies, percentages, and other pertinent statistical measures.

Results

The table presents demographic data categorized by sex, religion, and caste across two age groups: 60-75 and 76-90 years, with a total count for each variable. Under the "sex" variable, there are two categories: male and female. In the age group 60-75, there are 151 males (80.7%) and 177 females (75.3%), while in the 76-90 age group, there are 36 males (19.3%) and 58 females (24.7%). The "religion" category encompasses Hinduism, Buddhism, and Christianity.

Table 1: Distribution of Respondents by Age and other Demographic Variables

Variables	Age Group		Total
	60-75	76 and above	
Sex			
Male	151(80.7%)	36 (19.3%)	187 (100%)
Female	177(75.3%)	58(24.7%)	235(100%)
Religion			
Hindu	241(82.5%)	51(17.5%)	292(100%)
Buddhist	81(65.9%)	42(34.1%)	123(100%)
Christianity	6(85.6%)	1(14.3%)	7(100%)
Caste			
Bhramin	108(76.1%)	34(23.9%)	142(100%)
Chettri	76(80.0%)	19(20%)	95(100%)
Janjati	136(78.2%)	38(21.8%)	174(100%)
Dalit	8(72.7%)	3(27.3%)	11(100%)
Total	328(77.7%)	94(22.3%)	422(100%)

Source: Field Survey, 2024

For Hindus, there are 241 individuals (82.5%) in the 60-75 age group and 51 (17.5%) in the 76 and above age group. Buddhists comprise 81 individuals (65.9%) in the younger age bracket and 42 (34.1%) in the older bracket, while Christians account for 6 individuals (85.7%) in the former and 1 (14.3%) in the latter. The "caste" variable includes Brahmin, Chhetri, Janjati, and Dalit. In the Brahmin caste, 108 individuals (76.1%) fall in the 60-75 age group and 34 (23.9%) in the 76-90 age group. Similarly, the Chhetri caste has

76 (80.0%) and 19 (20.0%) individuals across the two age groups; Janjati has 136 (78.2%) and 38 (21.8%); and Dalit has 8 (72.7%) and 3 (27.3%). The total counts are summarized at the bottom, showing 328 individuals (77.7%) in the younger age group and 94 (22.3%) in the older age group, with a grand total of 422 individuals.

Table 2: Distribution of Respondent by Information on Economic Status

Variables	Number	Percent (%)
Bank balance		
Yes	107	25.4
No	315	74.6
Ornaments		
Yes	58	13.7
No	364	86.3
Old age allowance		
Yes	182	43.1
No	240	56.9
Fundamental needs fulfilled		
Yes	230	54.5
No	192	45.5
Monthly Family Income		
Less than 50,000	258	61.1
More than 50,000	164	38.9
Total	422	100.0

Source: Field Survey, 2024

The table provides a comprehensive overview of various financial and social indicators among a group of individuals. It categorizes data into variables such as "Bank balance in your name," "Ornaments in your name," "Old age allowance," "Fundamental needs fulfilled," and "Monthly Family Income," each with "Number" and "Percent (%)" columns. Under "Bank balance in your name," 107 individuals (25.4%) have a bank balance, while the majority, 315 (74.6%), do not. Regarding ownership of ornaments, only 58 individuals (13.7%) possess ornaments in their name, compared to 364 (86.3%) who do not. When it comes to receiving an old age allowance, 182 individuals (43.1%) benefit from it, while 240 (56.9%) do not. The data on fulfilling fundamental needs shows that 230 individuals (54.5%) have their basic needs met, whereas 192 (45.5%) do not. Lastly, in terms of monthly family income, 258 individuals (61.1%) earn less than 50,000, while 164 (38.9%) earn more than 50,000. The total number of respondents is 422, reflecting a diverse range of financial situations and social support among the surveyed individuals.

Table 3: Distribution of Respondent by their Health Status

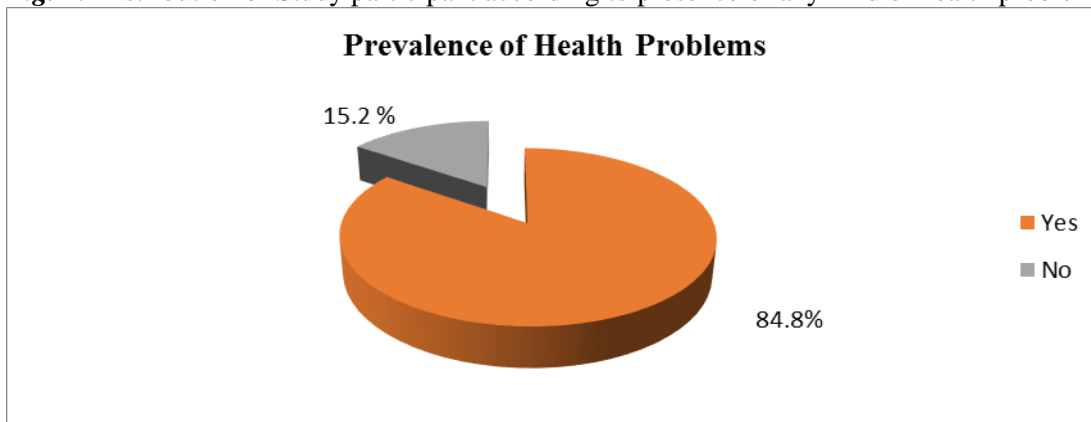
Variables	Number	Percent (%)
Presence of diabetes		
Yes	145	34.4
No	277	65.6
Presence of COPD		

Yes	72	17.1
No	350	82.9
Presence of Heart disease		
Yes	70	16.6
No	352	83.4
Presence of kidney disease		
Yes	8	1.9
No	414	98.1
Presence of joint pain		
Yes	181	42.9
No	241	57.1
Total	422	100.0

Source: Field Survey, 2024

The prevalence of various health conditions among respondents indicates that, in the "Presence of diabetes (self-reported)" category, 145 individuals (34.4%) have diabetes, while the majority, 277 (65.6%), do not. Similarly, Chronic Obstructive Pulmonary Disease (COPD) is present in 72 individuals (17.1%), while 350 (82.9%) do not have it. Heart disease is reported in 70 individuals (16.6%), whereas 352 (83.4%) do not suffer from it. A smaller percentage, 8 individuals (1.9%), have kidney disease, with a significant majority of 414 (98.1%) not having it. Lastly, the "Presence of joint pain" affects 181 individuals (42.9%), while 241 (57.1%) do not experience it. The total number of respondents is 422, providing a comprehensive overview of the health conditions prevalent among the surveyed group.

Fig. 1: Distribution of Study participant according to presence of any kind of health problems



Source: Field Survey, 2024

Out of the total of 422 individuals, we found that most of the respondents (84.8%) had at least one non-communicable disease condition, while 64 (15.2%) indicated that they had no health issues. This highlights a significant proportion of the population experiencing health concerns.

Table 4: Association between Socio Demographic information and Health Problem

Variable	Health Problem				Total		p-value
	No		Yes		Number	Percent	
	Number	Percent	Number	Percent			
Sex							
Male	35	18.7%	152	81.3%	187	100%	0.070
Female	29	12.3%	206	87.7%	235	100%	
Age group							
60-75	47	14.3	281	85.7	328	100	0.371
76-90	17	18.1	77	81.9	94	100	
Religion							
Hindu	42	14.4	250	85.6	292	100	0.350
Buddhist	22	17.9	101	82.1	123	100	
Christian	0	100	7	100	1	100	
Ethnicity							
Brahmin	19	13.4	123	86.6	142	100	0.192
Chhetri	21	21.1	74	77.9	95	100	
Janajati	23	13.2	151	86.8	174	100	
Dalit	1	9.1	10	90.9	11	100	
Marital Status							
Married	34	13.4	219	86.6	253	100	0.123
Unmarried	6	27.3	16	72.7	22	100	
Divorce	2	40	3	60	5	100	
Separated	3	30	7	70	10	100	
Widow/Widower	19	14.4	113	85.6	132	100	
Total	64	15.2	358	84.8	422	100	

Source: Field Survey, 2024

Table 4 provides a detailed examination of the presence of various assets and their association with reported health problems within the surveyed population. When considering whether individuals have a house in their name, there appears to be no significant difference in the prevalence of health problems between those who do and do not own a house, with percentages of 83.8 percent and 85.2 percent respectively, and a p-value of 0.736.

Discussion

The study provides valuable insights into the health challenges faced by the surveyed population. A significant 84.8% of the 422 individuals reported experiencing some health issue, highlighting a prevalent health concern among a substantial portion of the group. Interestingly, ownership of assets like a house, bank balance, or ornaments did not show a significant correlation with health problems, with p-values ranging from 0.319 to 0.736. These findings suggest that while these assets are often associated with socio-economic status, they may not directly influence health outcomes in this specific population, pointing to the need for further exploration of other potential determinants of health.

In a study conducted in Pharping, three-quarters (76.5%) of the respondents reported at least one physical health problem, with females being significantly more likely than males to report health issues ($p = 0.005$) (Chalise, 2019). The most common physical health problems included physical pain (60.4%), respiratory issues (38.4%), and gastritis (34.4%). Another study in Kushma Municipality revealed that the majority of the elderly population was in the age group of 60-69 years, with a mean age of 76.70 years (Paudel, 2022). Similarly, in Pakhribas, Kosi Zone, Nepal, Gupta and colleagues found that the majority of the elderly were in the 60-69 age group, aligning with the life expectancy of 65.8 years in 2010 (Gupta, 2016).

Gender differences in reported health problems were not statistically significant, with a slightly higher percentage of males (81.3%) reporting health issues compared to females (87.7%) ($p = 0.070$). Similarly, both age groups, 60-75 years and 76-90 years, showed high percentages of reported health problems without significant differences between them ($p = 0.371$). These findings are consistent with the general understanding that health concerns tend to increase with age.

Religious affiliation and caste did not emerge as significant predictors of health problems in this study. Buddhists and Hindus reported health problems at rates of 82.1% and 85.6%, respectively, with no significant difference ($p = 0.350$). Similarly, caste, including the Chhetri caste, which reported the highest percentage (77.9%), and the Janajati caste at 86.8%, did not significantly predict health problems ($p = 0.192$) (Paudel, 2022).

Marital status also did not show a significant association with health problems ($p = 0.123$), with unmarried individuals having the highest percentage (72.7%) reporting no health issues, and divorced individuals reporting the highest percentage (40%) of health problems.

Chronic health problems were prevalent, reported by 69% of the study population, with gastritis being the most common (36%), followed by chronic obstructive pulmonary disease (COPD) (20%) and others (Gupta, 2016). Comparing these findings with research from China, family socioeconomic status was found to have a significant impact on the health status of the elderly aged 60-69 and 70-79 years, but not for those aged 80 years and above (Zhou, 2022). This suggests that while socioeconomic factors may play a role in health outcomes, their influence may vary across different age groups. While the study provides valuable insights into the health concerns of the surveyed population, further research is needed to explore other potential factors affecting health outcomes, including lifestyle, access to healthcare, and social determinants of health.

Conclusion

The majority of respondents were between the ages of 60 and 75, with slightly more female respondents than male. More than half of the respondents followed the Hindu

religion, and a majority belonged to the Janjati community. Half of the respondents were married. The majority had a monthly family income of 50,000 or less. Most of the respondents were financially dependent on government allowances. One-tenth of the respondents did not have any property in their name. The majority of respondents were not taking the old age allowance provided by the government. The main reasons for not availing themselves of the allowance were being below the age of 68 and having pension benefits. A significant proportion of respondents reported high blood pressure. Half of the elderly respondents suffered from joint pain. Most respondents felt that their eyesight, memory, and ability to perform normal activities were similar to their previous levels. Slightly over half of the respondents exhibited poor health status, while less than half a percent reported good health status.

It indicates that various demographic variables, such as age, religion, marital status, and educational status, are significantly associated with the level of health status among the elderly participants. Additionally, the study found significant associations between health status and the personal financial situation of the elderly, including monthly income and personal sources of income. Furthermore, it highlights a significant association between the presence of chronic diseases and the ethnicity of the elderly respondents. These observations highlight the diverse socioeconomic backgrounds and health concerns among the elderly population.

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