

Morbidity Pattern and Health Seeking Behavior of Elderly People in Surnaya Rural Municipality, Baitadi, Nepal

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ABSTRACT

Background: The number of older persons in the world has increased substantially in recent years and the growth is projected to accelerate in the coming decades. With an increase in the proportion of the aged population, the elderly with ailments is also on the rise. The aged population has special health problems that are different from those of adults or young. This study aims to assess the morbidity patterns and health seeking behavior of elderly people.


Methods: A community-based, cross-sectional study was conducted among 197 elderly people in Surnaya Rural Municipality, Baitadi. Data was collected through face-to-face interview using a pre-tested structured questionnaire. Ethical approval was received, and ethical issues were addressed. Data were processed using IBS SPSS v.25.0. Descriptive statistics and chi-square test was used.

Results: The prevalence of morbidity was 71.6%. Respiratory condition was most reported, followed by digestive, musculoskeletal, and cardiovascular diseases. Further, 17.0% sustained injury. Healthcare seeking by 77.3% and 76.1% had treatment compliance. The morbidity condition was significantly associated with economic status ($p=0.041$), spiritual activity ($p=0.032$), and difficulty falling asleep ($p=0.003$). Distance to reach the nearest health facility ($p=0.022$) and presence of chronic health problems ($p<0.001$) was significantly associated with healthcare seeking behavior of the elderly.

Conclusion: The high prevalence of multiple morbidities in elderly was reported, among which the respiratory condition was leading. Still, large numbers of elderly do not seek healthcare and have low treatment compliance. Elderly-friendly health services, an extension of health insurance, and health screening services are recommended to enhance health seeking behavior of the elderly.

Keywords: Elderly people, morbidity pattern, health seeking behavior

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INTRODUCTION

Population ageing has been a worldwide phenomenon due to declining fertility, and mortality as well as improved public health interventions.¹ Two-thirds of the world's older people live in developing regions and

their numbers are growing faster. However, developing countries have less comprehensive policy and elderly health agenda, and Nepal is no exception.^{2,3} With an increase in the proportion of the aged population, the number of elderly with ailments is also on the rise but

the healthcare delivery system of most countries; particularly the developing ones are not equipped to tackle the problem.⁴ Population aging generates many challenges and sparks concerns about the pace of future economic growth, the operation and financial integrity of health care and pension systems, and the well-being of the elderly.⁵

Elderly patients are generally perceived to be more reluctant to seek health care for ailments.⁶ Health seeking behavior in the elderly population is important to know their attitude toward healthcare facilities taking into consideration the influence of respective socio-cultural, economic, and demographic circumstances.⁷ Health seeking behavior gives an idea of what people do when diseased and the factors influencing their behavior.⁴ The factors influencing may be characteristics of the subject, characteristics of the disease, and characteristics of the health services.⁸ Delays in healthcare can result in more rigid and complicated irreversible health consequences.⁹ There is limited elderly health-specific evidence found in the study area. Thus, the study aims to assess morbidity and health seeking behavior among elderly people.

MATERIALS AND METHODS

A community-based, cross-sectional study was conducted among elderly people, of age 60 years and above, residing in Surnaya Rural Municipality, Baitadi, Nepal. Data were collected from November 2021 to December 2021. The sample size was 197 elderly. It was calculated using the formula z^2pq/d^2 . Where the prevalence of 86.5% morbidity (from the study in 2018)¹⁰, 95% confidence interval, and 5% margin of error were taken. A pretested semi-structured questionnaire was used for collect data and a face-to-face interview technique was adopted at their residence. The sampling technique was purposive. Ethical approval was received from the IRC of Manmohan Memorial Institute of Health Sciences (MMIHS-IRC 610) and the ethical aspect was considered.

The data were entered and analyzed using IBM SPSS Statistics version 25.0. Based on the distribution and variance, appropriate statistical tests were used for analysis. Descriptive analysis was used to describe background characteristics and prevalence. Chi-square test was used to test the difference between the categorical variables, and $p < 0.05$ was considered statistically significant.

RESULT

The mean age of the participants was 70.66 years with a Standard Deviation (SD) of 7.35, with age ranging from 60 to 95 years. Out of 197 participants, 59.9% were female and 40.1% male. Most of the participants (89.3%) were living in joint families. The most common living arrangement was living with a son and daughter-in-law (88.8%), followed by living with a spouse (5.1%). More than half of the participants (52.3%) were smokers or tobacco users. Nearly four out of ten (36.0%) participants had difficulty falling asleep (Table 1).

Table 1: Characteristics of the participants (n=197)

Characteristics	Frequency (n)	Percentage (%)
Age in years		
Below 70 years	95	48.2
70 years and above	102	51.8
Mean \pm SD (70.66 \pm 7.35 years)		
Sex		
Male	79	40.1
Female	118	59.9
Ethnicity		
Brahmin	49	24.8
Chhetri	125	63.5
Dalit	23	11.7
Education status		
Illiterate	131	66.5
Literate	56	28.4
School education	10	5.1
Type of family		
Nuclear	21	10.7
Joint	176	89.3
Living arrangement		
Son and daughter-in-law	175	88.8
Spouse	10	5.1
Single	9	4.6
Others	3	1.5
Bearing personal expenses		
Self	43	21.8
Family	154	78.2
Substance habit		
No	88	44.7
Smoking or tobacco	103	52.3
Alcoholism	6	3.0
Spiritual activity		
Yes	87	44.2
No	110	55.8
Difficulty falling asleep		
Yes	71	36.0
No	126	64.0

Large proportions of elderly people (71.6%) were suffering from a health problem. Among them, respiratory diseases (57.4%) were leading as reported, followed by digestive (31.2%), musculoskeletal (22.0%), cardiovascular (10.6%), mental and nervous diseases (7.8%), genitourinary diseases (7.1%), and endocrine and hormonal disease (6.4%). Further, 41.8% of participants had eye problem followed by hearing problem (31.9%), and 17.0% of the elderly sustained injuries (Figure 1).

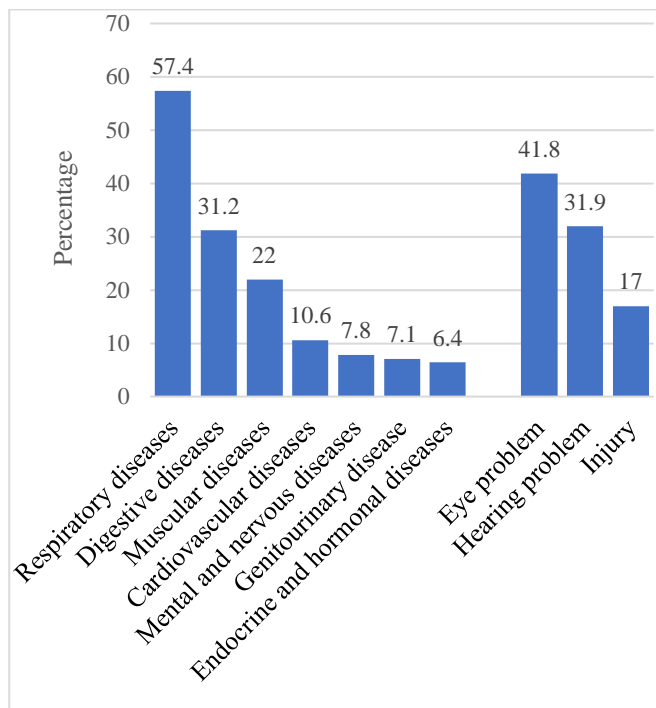


Figure 1: Morbidity pattern of the participants (n=141)

Among 141 morbid participants, 77.3% sought health care. The major reasons for not seeking healthcare were considering obvious ageing and feeling no need for medicine (55.0%), followed by shortage of money (28.1%) and distance of health facilities (21.9%). Slightly more than three fourth 76.1% had treatment compliance. Slightly below half (47.7%) of the participants preferred both traditional and modern medicine to seek treatment, where 38.5% prefer modern allopathic and 13.8% preferred traditional. Further, 64.5% of the participants preferred government health facilities for the treatment and 25.7% for private health facilities (including pharmacy), still 9.2 % preferred Dhami/Jhakri. Health insurance scheme enrollment was low (7.3%) among the participants (Table 2).

Table 2: Healthcare seeking related characteristics of participants (n=141)

Characteristics	Frequency (n)	Percentage (%)
Presence of Morbidity (n=197)	141	71.6
Healthcare seeking (n=141)		
Yes	109	77.3
No	32	22.7
Reasons for not seeking (n=32)		
Consider obvious ageing, feels no need for medicine	16	50
Shortage of money	9	28.1
Distance of health facility	7	21.9
Treatment compliance (n=109)		
Yes	83	76.1
No	26	23.9
Reasons for non-compliance *		
Long duration of treatment, no relief from medicine,	11	42.3
High treatment cost	9	34.6
Consider an obvious ageing process, feels no need for medicine	8	30.8
Side effects of medicine/treatment	2	7.7
Preferred treatment (n=109)		
Traditional	15	13.8
Modern allopathic	42	38.5
Both	52	47.7
Preferred treatment place		
Government health facility	71	65.1
Private health facility	15	13.8
Pharmacy	13	11.9
Traditional healers – Dhami, Fukne	10	9.2
Health insurance enrollment		
Yes	8	7.3
No	101	92.7
Nearest health facility (n=141)		
Less than 30 minutes	59	41.8
More than 30 minutes	82	58.2
Caretaker during illness (n=141)\		
Son and daughter-in-law	83	58.9
Husband and wife	9	6.4
Combined	48	34
Relatives	1	0.7
Treatment cost bearer (n=141)		
Self	34	24.1
Other family members	107	75.9
*Multiple responses		

The proportion of morbidity was found higher in the elderly belonging to 70 years and above of age, male, brahmin ethnicity, joint family, low socio-economic status, substance use (smoking, tobacco, alcohol), engaged in spiritual activity, and difficulty falling asleep. The presence of morbidity had statistically significant with economic status ($p = 0.041$), Spiritual activity ($p = 0.032$), and difficulty in falling asleep ($p = 0.003$) (Table 3).

Table 3: Association of morbidity with selected variables

Variables	Presence of morbidity		P value
	Yes, n (%)	No, n (%)	
Age			
< 70 years	66 (69.5)	29 (30.5)	0.318
≥ 70 years	75 (73.5)	56 (26.5)	
Sex			
Male	61 (77.2)	18 (22.8)	0.151
Female	80 (67.8)	38 (32.2)	
Ethnicity			
Brahmin	39 (79.6)	10 (20.4)	0.231
Chhetri	88 (70.4)	37 (29.6)	
Dalit	14 (60.9)	9 (39.1)	
Family type			
Nuclear	14 (66.7)	7 (33.3)	0.598
Joint	127 (72.3)	49 (27.8)	
Socio-economic status			
Middle to high	111 (68.5)	51 (31.5)	0.041*
Low	30 (85.7)	5 (14.3)	
Substance abuse			
Yes	79 (72.5)	30 (27.5)	0.754
No	62 (70.5)	26 (29.5)	
Spiritual activity			
Yes	69 (79.3)	18 (20.7)	0.032*
No	72 (65.5)	38 (34.5)	
Difficulty falling asleep			
Yes	60 (84.5)	11 (15.5)	0.003*
No	81 (64.3)	45 (37.7)	

*Significant at $p < 0.05$

The healthcare seeking behavior was found proportionately higher in the elderly belonging to below 70 years of age, male, brahmin/Chhetri ethnicity, low socio-economic status, joint family, self-bearing of treatment expenses, near accessible health facility, and having a chronic health problem. Healthcare seeking behavior had a statistically significant association with

the accessibility of health facility ($p = 0.022$) and the presence of chronic health problems ($p < 0.001$) (Table 4).

Table 4: Association of healthcare seeking with selected variables

Variables	Healthcare Seeking		P value
	Yes, n (%)	No, n (%)	
Age			
< 70 years	54 (56.8)	41 (43.2)	0.680
≥ 70 years	55 (53.9)	47 (46.1)	
Sex			
Male	48 (60.8)	31 (39.2)	0.243
Female	61 (51.7)	57 (48.3)	
Ethnicity			
Brahmin/Chhetri	98 (56.3)	76 (43.7)	0.441
Dalit	11 (47.8)	12 (52.2)	
Family type			
Nuclear	9 (42.9)	12 (57.1)	0.224
Joint	100 (56.8)	76 (43.2)	
Socio-economic status			
Middle to high	86 (53.1)	76 (46.9)	0.173
Low	23 (65.7)	12 (34.3)	
Expenses bearer			
Self	27 (79.4)	7 (20.6)	0.736
Family members	82 (76.6)	25 (23.4)	
Distance to health facility			
<30 Minutes	51 (86.4)	8 (13.6)	0.022*
>30 Minutes	58 (70.7)	24 (29.3)	
Presence of chronic health problem			
Yes	109 (77.3)	32 (22.7)	<0.001**
No	0 (0.0)	56(100.0)	

*Significant at $p < 0.05$, **Fisher's exact test

DISCUSSION

The study reported 71.6% morbidity among the elderly. Other studies also revealed a similar proportion of morbidity among the elderly.^{6,10,11} Most of the elderly reported multiple morbid conditions and respiratory problem (57.4%) was the leading one. Other studies^{10,12} also reported multiple morbid conditions. However, the study in urban areas reported that hypertension was the leading morbid condition. The high prevalence of respiratory diseases in this study might be due to indoor air pollution caused by cooking food in firewood.

Age had no statistically significant association with morbidity ($p=0.318$) in this study. In contrast to this, a significant association with age (0.037) was reported in a study in West Bengal.⁴ The reported

morbidity proportion was found more in male than female elderly, which was not significant ($p=0.151$). This might be due to substance abuse (smoking, tobacco, alcohol) among males, exposure to other risk factors, or less expression by female elderly. Further, the proportion of morbidity was higher (79.3%) in the elderly engaged in spiritual activity ($p = 0.032$). This might be due to practices associated with tradition, belief, and religion, which may include food taboos, fasting, beliefs, and other cultural values.

The study revealed that 22.7% did not seek healthcare treatment. The reasons behind not seeking health care were considering morbidity in the elderly as an obvious process, feeling no need for medicine, shortage of money, and long distance to the health facilities. Further might be due to low coverage of health insurance. Nearly one-fourth (23.9%) were non-compliance with treatment. Treatment cost, lengthy treatment, and neglecting health conditions considering it an ageing process were reported as the major reason for non-compliance. However, a study¹⁰ in Bharatpur, Nepal showed that all the elderly sought treatment. The healthcare seeking practice was nearly similar to studies in rural South and North India.^{6,13} Further, the treatment compliance was lower (41.35%) than the study, where the high cost of treatment was reported as a major reason for non-compliance.¹³

The study conducted in the urban settlement of Odisha, India¹⁴ showed high preference (90.74%) for modern allopathic treatment than the study. The relatively low preference for modern allopathic in the study area might be due to the lack of easy access to modern health facilities, out-of-pocket expenditure, and reluctance to seek treatment. Still, 13.8% of participants followed traditional treatment, which was similar to

other studies conducted in Manang, Bharatpur, Nepal and in rural area of eastern Uttar Pradesh, India.^{9, 10, 15} The study showed that the majority of the participants preferred government health facility (65.1%) for the treatment, and still 9.2% preferred Dhami/Jhakri. The high preference for government health facilities might be due to affordable services in government facilities. **Limitation** The study covered a rural area of Far western Nepal, and the cultural and environmental context may vary. Further, subject to limitations posed by self-reported morbidity which also not covered the psychological aspects, purposive sampling was adopted.

CONCLUSION

Multiple morbidities were reported among the elderly and respiratory conditions were leading, followed by digestive, musculoskeletal, and cardiovascular diseases. Further, nearly one-fifth sustained an injury. Most of the elderly sought, healthcare only after being suffered, although compliance was poor. The government health facility was the preferred place for treatment. Modern medical care was the primary choice and still, traditional systems (including traditional healers) existed in practice. Based on findings, elderly-friendly health services, extension of health insurance, and elderly health screening services are recommended to enhance health seeking behavior of the elderly.

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