# A community based cross-sectional study on self-perception of health status and health seeking behaviour among elderly population in Haldwani block, Uttarakhand

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#### Abstract

**Background:** With advancing age, ill-health becomes a major hindrance for the well-being of the older population. Therefore, not only physical but even perceived health is an important predictor for their living happily.

**Objectives:** To know the sociodemographic profile of the elderly population, also to study the self-perceived health status and health seeking behavior among them.

**Materials and Methods:** Community-based cross-sectional study in rural areas of Haldwani block in the district Nainital of Uttarakhand. Four hundred and forty elderly patients aged 60 years and above were selected by two-stage sampling technique. Data collected during a period of 1 year were analyzed using SPSS version 16.

**Result:** Majority (59.44%) of the older population with age group of 60-69 years were married (59.77%), illiterate (60.0%), currently not working (78.64%), and living with spouse and children (54.09%). About 54.55% were head of their household and 46.82% were financially dependent on others. The difference between male and female about their self-perceived health status was significant ( $\chi^2 = 11.2$ , p = 0.004). Mostly (96.51%) preferred Allopathic system of medicine and government hospital was most commonly used to seek treatment.

**Conclusion:** The health system should be comprehensive, affordable, accessible, and sensitive to the needs of geriatric. Geriatric specialist should be incorporated in primary care health system.

KEY WORDS: Self-perception, health status, health seeking behavior, elderly population

# Introduction

Advancement in medicine helped more people to live longer lives and this increase in life expectancy combined with marked fall in fertility rates are leading to the rapid aging of populations around the world.<sup>[1,2]</sup> With one in nine persons in the world aged 60 years or over, projected to increase to

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one in five by 2050.<sup>[3]</sup> The number of people aged 60 years or older will rise from 900 million to 2 billion between 2015 and 2050 (moving from 12% to 22% of the total global population).<sup>[4]</sup> In 2050, 80% of older people will be living in low- and middle-income countries.<sup>[5]</sup>

With a comparatively young population, India is still poised to become home to the second largest number of older persons in the world. The population over the age of 60 years has tripled in last 50 years in India and will increase to 198 million in 2030.<sup>[6]</sup> With myriad health problems, suitable health services are needed for this ever increasing segment of the population. However, most of the hospitals in India (both private and government) do not have an exclusive geriatric unit to provide better support system to the older population. Often, the early diagnostic process among the older people is ignored as symptoms are considered to be a part of aging process.<sup>[7]</sup>

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Health seeking behavior has been defined as "sequence of remedial actions that individuals undertake to rectify perceived ill-health."<sup>[8]</sup> TThis study was planned to know the socio-demographic profile of the elderly, to assess about their self-perception of health status and health seeking behaviour.

#### **Materials and Methods**

A community-based cross-sectional study was carried out in the villages covered under rural health training center of the Department of Community Medicine in block Haldwani, district Nainital of Uttarakhand. Study period was for 1 year duration from November 2013 to October 2014.

The sample size was calculated based on the formula 4  $pq/L^2$ . Due to lack of information on morbidity and health seeking among elderly patients in the study area, the calculation was based on the assumption of prevalence to be 50% and at an absolute precision of 5% the sample size came as 400. Assuming the non-response rate as 10%, the final sample size was fixed at 440.

Two-stage sampling technique was applied, as in first stage 11 subcenters (SCs) were selected randomly out of 22 SCs attached to block PHC Motahaldu, 40 older patients were selected from each of these 11 SCs to get the adequate sample size of 440. A list of all the elderly patients was made for all SCs selected from the subcenter survey register maintaining the order of the families as per the survey done. In the second stage, to choose older patients from the study population, every 10th older patient had to be taken. This approximate sampling interval was calculated on the basis of desired sample size and total elderly population satisfying inclusion and exclusion criteria. If some elderly patients did not consent for the interview or could not be contacted then the next name was selected from the list.

The elderly population, who had completed 60 years of age at the time of investigation, were permanent resident and willing to participate were included in the study after taking informed consent and ensuring the confidentiality.

A pretested, semi-structured questionnaire was used to collect the data, which was later coded, entered into Microsoft excel sheet and was analyzed using SPSS version 16. Statistical analysis was carried out using  $\chi^2$ -test and p < 0.05 was considered significant. The permission was taken from Institutional Ethical Committee before the commencement of study.

## Result

Of the 440 old people, majority (59.54%) were in the age group of 60-69 years, followed by 29.32% in the age group of 70-79 years and 11.14% in 80 years and above. With increase in age percentage of elderly population decreases both for male and female. Majority of the subjects were females (57.5%). Most of them were married (59.77%), illiterate (60.0%), and currently not working (78.64%). The difference

between male and female older population for marital status ( $\chi^2$ = 24.1, *p* = 0.001), literacy status ( $\chi^2$ =118, *p* = 0.001), and employment status ( $\chi^2$ =88.8, *p* = 0.001) was found statistically significant. Maximum number (59.09%) of the elderly population belongs to class III according to modified BG Prasad classification. Most common living arrangement (54.09%) was with spouse, children, and grandchildren; majorly (54.55%) they were the head of household. About 46.82% of the elderly population were financially dependent on others [Table 1].

Table 2 shows the self-perceived health status among the elderly population as fair (83.41%), poor (12.27%), and good (4.32%). The difference between male and female respondents was found to be significant ( $\chi^2 = 11.2$ , p = 0.004).

About 96.51% preferred Allopathic system of medicine and 3.41% as Ayurveda [Table 3]. Table 4 depicts source of treatment in acute morbidity as government hospital (47.73%), non-registered practitioner (25%), private hospital (14.54%), medical store (8.41%), and home remedies (4.32%).

In case of chronic morbidity 53.18% would seek government hospital, 39.55% seek private hospital, and 7.27% seek non-registered practitioner [Table 5].

#### Discussion

In this study, self-perceived health status among elderly population was fair in 83.41%, poor in 12.27%, and good in 4.32%. The difference between male and female was statistically significant ( $\chi^2 = 11.2$ , p = 0.004). The most preferred system of medicine was allopathic (96.51%). In this study, government hospital was the most common source of treatment both for acute and chronic morbidity, that is, 47.73% and 53.18%, respectively.

The National Sample Survey (NSS 60th round, 2004)<sup>[9]</sup> assessed about the self-perceived current health status among elderly population. In rural area, about 70.67% consider their health as 'good/fair' whereas 24.45% reported to be in 'poor' health. Only 4.88% of elderly population said they are in 'excellent/very good' health. Woo et al.<sup>[10]</sup> reported that self-assessed health status of elderly population in Korea was poor in 47.9%, good in 31.7%, and moderate in 20.4%. He also observed statistically significant difference between male and female.

Sharma et al.,<sup>[11]</sup> Kumar et al.,<sup>[12]</sup> Hakmaosa et al.,<sup>[13]</sup> Datta et al.,<sup>[14]</sup> Qadri et al.,<sup>[15]</sup> Karmakar et al.,<sup>[16]</sup> and Goswami et al.<sup>[17]</sup> also reported in their research that allopathic system was most preferred with utilization rate of 81.4%, 57.6%, 98.5%, 45.2%, 93.6%, 53.37%, and 77.3%, respectively.

The findings of Sharma et al.,<sup>[11]</sup> Kumar et al.,<sup>[12]</sup> Hakmaosa et al.,<sup>[13]</sup> and Datta et al.,<sup>[14]</sup> were in agreement with this study as services of Government health facility were availed more commonly in their study with 60.7%, 61.7%, 51.5%, and 82%, respectively. Qadri et al.<sup>[15]</sup> found non-government health (92.5%) care facility as main source, which includes both qualified and unqualified private practitioners whereas Karmakar et al. (41.02%),<sup>[16]</sup> Goswami et al. (60%),<sup>[17]</sup> and Narapureddy

Variables	Male	Female	Total
	No. (%)	No. (%)	No. (%)
Age group (years)			
60-69	100 (53.48)	162 (64.03)	262 (59.54)
70-79	62 (33.15)	67 (26.48)	129 (29.32)
≥80	25 (13.37)	24 (9.49)	49 (11.14)
Marital status			
Married	162 (86.64)	101 (39.92)	263 (59.77)
Widowed	25 (13.36)	152 (60.08)	177 (40.23)
Literacy status			
Illiterate	57 (30.48)	207 (81.82)	264 (60.0)
Literate	130 (69.52)	46 (18.18)	176 (40.0)
Employment status			
Working	80 (42.78)	14 (5.53)	94 (21.36)
Not working	107 (57.22)	239 (94.47)	346 (78.64)
Socioeconomic status			
Class I	00 (0.0)	01 (0.39)	01 (0.23)
Class II	22 (11.75)	24 (9.49)	46 (10.45)
Class III	112 (59.89 )	148 (58.5)	260 (59.09)
Class IV	36 (19.25)	59 (23.32)	95 (21.59)
Class V	17 (9.09)	21 (8.3)	38 (8.64)
Living arrangement			
Alone	03 (1.6)	07 (2.77)	10 (2.27)
Spouse only	14 (7.49)	09 (3.56)	23 (5.23)
Spouse, children, and grandchildren	146 (78.07)	92 (36.36)	238 (54.09)
Children and grandchildren	22 (11.77)	135 (53.36)	157 (35.68)
Others	02 (1.07)	10 (3.95)	12 (2.73)
Head of household			
Self	170 (90.91)	70 (27.67)	240 (54.55)
Spouse	00 (0.00)	96 (37.95)	96 (21.82)
Son	14 (7.49)	72 (28.46)	86 (19.54)
Others	03 (1.60)	15 (5.92)	18 (4.09)
Financial dependency			
Dependent	31 (16.58)	175 (69.17)	206 (46.82)
Partially dependent	53 (28.34)	69 (27.27)	122 (27.73)
Independent	103 (55.08)	09 (3.56)	112 (25.45)

 Table 1: Distribution of the elderly population according to their sociodemographic profile

Table 2: Distribution of older population according to self-perceived health status

Self-perceived	Male		Fei	male	Total	
health status	No.	%	No.	%	No.	%
Good	14	7.49	05	1.98	19	4.32
Fair	157	83.96	210	83.00	367	83.41
Poor	16	8.55	38	15.02	54	12.27
Total	187	100.00	253	100.00	440	100.00

 $(\chi^2 = 11.2, p = 0.004)$ 

Table 3: Distribution of older population according to preferred system of medicine

		-			
Male		Fe	male	Total	
No.	%	No.	%	No.	%
179	95.72	246	97.23	425	96.59
08	4.28	07	2.77	15	3.41
187	100.00	253	100.00	440	100.00
	No. 179 08 187	Male           No.         %           179         95.72           08         4.28           187         100.00	Male         Fe           No.         %         No.           179         95.72         246           08         4.28         07           187         100.00         253	Male         Female           No.         %         No.         %           179         95.72         246         97.23           08         4.28         07         2.77           187         100.00         253         100.00	Male         Female         T           No.         %         No.         No.           179         95.72         246         97.23         425           08         4.28         07         2.77         15           187         100.00         253         100.00         440

Health facility availed	Male		Female		Total	
	No.	%	No.	%	No.	%
Home remedies	08	4.28	11	4.34	19	4.32
Medical store	13	6.95	24	9.49	37	8.41
Government hospital	89	47.60	121	47.83	210	47.73
Private hospital	32	17.11	32	12.65	64	14.54
Non-registered practitioner	45	24.06	65	25.69	110	25.0
Total	187	100.00	253	100.00	440	100.00

Table 4: Distribution of older population according to health facility availed in acute morbidity

Table 5: Distribution of older population according to health facility availed in chronic morbidity

Health facility availed	Male		Female		Total	
	No.	%	No.	%	No.	%
Government hospital	93	49.73	141	55.73	234	53.18
Private hospital	82	43.85	92	36.36	174	39.55
Non-registered practitioner	12	6.42	20	7.91	32	7.27
Total	187	100.00	253	100.00	440	100.00

et al. (45.7%)<sup>[18]</sup> observed private practitioner more commonly visited by the elderly population.

The treatment sought in case of both acute and chronic morbidity has been asked, but the question regarding caregiver during illness and out of pocket expenditure during acute and chronic morbidities as well as awareness and utilization of health insurance by the elderly population has not been asked. There is a scope for further research on this topic.

# Conclusion

Since majority of the elderly population were utilizing government health facilities because they may be cheaper and near to their residence, so there is a need to integrate geriatric health care in the primary health-care system. Every effort should be made to make these services available, affordable, and accessible to all the elderly population irrespective of religion, caste, creed, culture, and also economic barrier.

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