



SELF-RATED HEALTH AMONG ELDERLY OF AURANGABAD CITY : A COMMUNITY BASED CROSS-SECTIONAL STUDY

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ABSTRACT Self-rated health (SRH) refers to a single question such as “in general, would you say that your health is excellent, very good, good, fair, or poor?”. Self-rated health is a measure by which a person expresses perceptions about his/her health status. This community based cross sectional study was conducted to explore the SRH of elderly from Aurangabad city. 68.34 % of all elderly reported their SRH to be good. Age, sex and the morbidity status of the elderly were found to be important predictors for poor self-reported health.

KEYWORDS : Self-rated health, Self-reported health, Self-assessed health, perceived health, Elderly

INTRODUCTION

Aging is a complex process, influenced by many factors. ¹ India has acquired the label of “an aging nation.” ²

By 2011 India has exceeded that proportion (8.0 percent) and is expected to reach 12.6 percent in 2025. ³ Self-rated health refers to both a single question such as “in general, would you say that your health is excellent, very good, good, fair, or poor?”. Self-rated health is a measure by which a person expresses perceptions about his/her health status. it is primarily based on an individual's assessment of their health. ⁴

Self-assessed health status can provide a holistic view of the health of the elderly, it reflects the mental health of that person. ⁵ Subjective ratings of health have been a focus of intense research in gerontology for decades. ⁶ Furthermore, people with perceived poor health make more outpatient visits and use more hospital services. ⁷

The use of SRH is an appropriate subjective measure—an indicator of well-being that encompasses physical, psychological, and social aspects of health. ⁸

In view of the scarcity in the literature regarding perception of own health by elderly in the study area, a community based cross sectional study was conducted to explore the perception of elderly population regarding their own health.

SUBJECTS AND METHODS:

A community based cross sectional study was conducted among the elderly (60 years and above) from 32 randomly selected electoral wards of Aurangabad city, which is divided in 113 electoral wards after approval from the IEC of GMC Aurangabad. Informed consent was taken from participants before enrolling them in study. The sample size was determined by formula $z^2 * p * q / e^2$ taking $p = 50\%$, and absolute error 5% with 95% confidence interval which comes to 400. As the population of elderly in the selected wards was heterogeneously distributed, elderly were proportionately allocated to each ward using the formula : $n = \text{Elderly population of the ward} / \text{Total elderly population from all wards} \times 400$. Non consenting elderly, and those unable to answer the interviewer's questions were excluded. Principal investigator conducted face to face interview with the study participants by using a pretested & pre structured questionnaire was used to collect data Self-rated health (SRH) respondents were asked: 'How do you rate your general health condition?'. The question had five response categories: excellent, very good, good, fair and poor. We categorized the response into two groups: 'Good', which included excellent, very good and good, and 'Poor', which included fair and poor to facilitate more meaningful interpretation of the findings. The data entry was done in Microsoft Office Excel 2010 software, and analysed using IBM SPSS software 16 trial version.

RESULTS:

Table 1 reveals the percentage distribution of the socioeconomic and

demographic factors of the elderly population. Majority of the participants were below 80 years of age (91.1%). There was relatively equal representation of both sexes in the study sample. Majority of elderly had at least 1 diagnosed morbidity at the time of data collection. Only 11.8 % were free of any morbidity.

17.84 % reported their self-rated health as 'excellent', 34.56 % as very good, and 15.64% as good. Overall 68.34 % of all elderly reported their self - rated health to be good. 10.22 % said their health was 'fair' (neither good nor bad), and 21.44% said it was poor. Overall 31.66% of all elderly reported their self - rated health to be poor. Table 1 also shows bivariate findings of the self-rated health status of the elderly by socio demographic characteristics. Age, sex, and morbidity status of the elderly were found to be significantly associated with self - rated health in elderly ($p < 0.05$).

This study uses logistic regression (Table-2) to investigate the extent of association between self rated health with age, sex, and morbidity of elderly subjects through Odds Ratio (OR) and 95% Confidence Interval(CI). The logistic regression model was statistically significant, $\chi^2 = 44.633$ $p < 0.000$. The model explained 14.2 % (Nagelkerke R²) of the variance in self - rated health and correctly predicted the poor self - rated health 69.5 % times. Age, sex, and morbidity of elderly were all found to be significantly associated with self-rated health ($p < 0.05$)

Table 1 :Socio Demographic Profile Of Elderly And Association With Self -Rated Health

Variable		Frequency n(%)	SRH (n)		χ^2	p value
			Good	Poor		
Age	Below 80 years	380(91.1)	64.3	26.9	9.416	<0.01
	Above 80 years	37(8.9)	4.1	4.8		
Sex	Male	202(48.4)	30	18.4	7.567	<0.01
	Female	215(51.6)	38.4	13.2		
Religion	Hindu	208 (49.9)	36	13.9	2.726	0.99
	Non- Hindu	209 (50.1)	32.4	17.7		
Education	Illiterate	146(35)	24.2	10.8	0.072	0.788
	Literate	271(65)	44.1	20.9		
Marital status	Married	283(67.9)	45.3	22.5	0.992	0.319
	Widowed	134(32.1)	23	9.1		
Socio economic status	Above poverty line	396(95)	65.5	29.5	1.283	0.257
	Below poverty line	21(5)	2.9	2.1		
Living arrangement	Alone	11(2.6)	2.1	0.5	0.416	0.5188
	With family	406(97.4)	66.2	31.2		
Employment status	Employed	70(16.8)	12.2	4.6	0.792	0.374
	Unemployed	347(83.2)	56.1	27.1		
Economic dependency	Fully independent	87(20.9)	14.4	6.5	0.20	0.889

	Partially or fully dependent	33.(79.1)	54	25.1		
Addiction	No addiction	116(27.8)	19.9	7.9	0.764	0.382
	At least 1 addiction	301(72.2)	48.4	23.8		
Morbidity	Present	368(88.2)	57.1	31.2	19.51	<0.01
	Absent	49(11.8)	11.3	0.5	2	

* chi square test with Yates correction applied.

Background Characteristics	B	S.E.	Wald	Df	Sig.	Exp(B)	95.0% C.I. for Exp(B)	
							Lower	Upper
Age (1=80 Years And Above)	1.035	.364	8.096	1	.004	2.815	1.380	5.742
Sex (1=Females)	-.742	.223	11.080	1	.001	.476	.308	.737
Morbidity (1=Elderly With Morbidity)	2.653	.735	13.025	1	.000	14.198	3.361	59.973

DISCUSSION:

In our study 68.34 % of all elderly reported their self - rated health to be good, and the rest said it was poor. The report based on the enquiry on 'Morbidity and Health Care' of the NSSO (National Sample Survey Organisation) conducted all over India in 2004 shows similar findings stating that as high as 55 to 63 per cent of the aged with sickness felt that they were in a good or fair condition of health. Another study comparing SRH in India, China and Latin America concluded that India has a high prevalence of good SRH.¹⁰ In contrast Barua, et al. found that only 25.6% reported their general health status as "good" while most elderly (56.8%) reported their health as "moderate" and 22% elderly rated their health condition as "bad".¹¹ Age was found to significantly associated with self-rated health in our study. A study analysing the data from Building a Knowledge Base on Population Ageing in India (BKPAI) survey conducted by UNFPA India also concluded that a significantly higher proportion of those aged 80 and above (71%) reported poor health as compared to those aged 60–69 years (50%).¹² Another study that compared the self-rated health in china and USA found that older adults lower self-rated health.¹³

We found that sex of the elderly was also significantly associated with self-rated health. Our finding were corroborated by Confortin SC et al.¹⁴ However, another study reported that both the factors of age and sex of elderly and their influence on SRH was heterogeneously distributed across countries.¹⁶ A study among the elderly of Thailand revealed that, respondents who had 1, 2, or 3 or more chronic diseases were 1.8 times, 2.4 times, and 3.7 times, respectively, more likely to report their health as poor compared to those who had no chronic disease at all.¹⁷

Mazumdar and Gerdtham, observed heterogeneity in self-assessed health (SAH) among the aged in India using data from the 60th Round of National Sample Survey (2004) and concluded education, economic activity status, physical mobility, and morbidity status are significant predictors of SRH.¹⁸ Mishra, Sharma & Talukdar in another study extracted and analysed the data from SAGE (Study of Global Ageing and Adult Health) Wave-1 India confirmed the association age, sex and morbidity to SRH but also found that socio economic status and education are also important predictors of SRH.¹⁹

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