Vol 10| Issue 2| 2020 | 129-135.

e-ISSN 2248 – 9142
print-ISSN 2248 – 9134

International Journal of
Current Pharmaceutical & Clinical Research

www.ijcpcr.com

SOCIAL DETERMINANTS OF SUPPORT AND SOCIAL ADJUSTMENT AMONG ELDERLY OF PUDUCHERRY

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ABSTRACT
Background: Globally 10% of the world's population is elderly and is expected to increase to 21% by 2051 In India, the phenomenon of population ageing is becoming a major concern for the policy makers, during last two decades with more 8.6% aged more than 60 years. However, the definition of quality of elderly life and its determinants remains a concern. The social determinants of perceived physical health, amenable for intervention, working status, not being neglected by the family, involvement in social activities, determinants for social relations in social group, with the family members - these subjective variables account for quality of life of elderly. Several investigators in the West have recognized the importance of subjective evaluation over objective life conditions. In India, there is sparse research in understanding the social determinants among the elderly. **Methodology:** A community based cross sectional study was conducted among 200 elderly individuals (60 years and above), out of which 100 individuals were enrolled from a rural setup and 100 individuals were enrolled from an urban setup. An interview was conducted with a pretested questionnaire which was based on The RAND Social Health Battery and The General Wellbeing Schedule after getting an informed consent. **Results:** About 70% and 64% of rural elderly men and women respectively were anxious while only 65% and 67% of urban men and women respectively were anxious. About 32% and 36% of rural men and women respectively were depressed while 30% and 31% of urban women were depressed. 48% of the rural men and 48% rural women showed positive wellbeing while 49% urban males and 46% urban females showed positive well-being. **Conclusion:** Social well-being of elderly living in urban and rural areas of Puducherry are not different despite the significant difference economic front which is important to health care of the elderly. Regardless of stressful life events, high levels of social well-being were found.

Key words

INTRODUCTION

According to the data from World Population Prospects: the 2015 Revision, the number of older persons - those aged 60 years or over - has increased substantially in recent years in most countries and regions.(1) Globally 10% of the world's population is elderly and is expected to increase to 21% by 2051(2). Population ageing is poised to become one of the most significant social transformations of the twenty first century, with implications for nearly all sectors of society, including labour and financial markets, the demand for goods and services such as housing, transportation and social protection, as well as family structures and intergenerational ties(3)(4)(1). The UN defines a country as 'ageing' where the proportion of people over 60 reaches seven percent (1,5).

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The older population is growing faster in urban areas than in rural areas. At the global level between 2000 and 2015, the number of people aged 60 years or over increased by 68% in urban areas, compared to a 25% increase in rural areas(1,5,6). Around the world, there is growing concern to achieve sustainable quality of life. The concept of "active ageing" has also fostered interest in the well-being and life satisfaction dimension(1,7).

The total population of India according to the 2011 census is 1210.9 million of which the elderly contributes to 103.9 million(5,8). 73.3 million elderly live in rural areas and 30.6 million elderly live in urban areas(8,9). The growth of the elderly population in India is due to the longevity of life achieved because of economic well-being, better medical facilities and reduction in fertility rates(6,10–12). In India, the decadal growth in general population has shown a decreasing trend since 1961 and so is the growth in elderly population till 2001(7,13). In the last one decade, however, that is between 2001 and 2011, the growth in elderly population has shot up to 36% while the same was 25% in the earlier decade(1,8,13). It is observed in India that the growth in elderly population has always been more than the growth in general population(14,15).

OBJECTIVES

1. To assess and compare the social determinants of elderly life in a rural and an urban setting of Puducherry
2. To ascertain the factors governing the social adjustment in terms of social support, or the ability to perform normal roles in the society

Methodology

A community based cross sectional study was conducted among 200 elderly individuals out of which 100 individuals were enrolled from the village of Koodapakkam (Rural) and 100 individuals were enrolled from the area of Mudaliarpet (Urban) of Puducherry. An interview was conducted with a pretested questionnaire which was based on the RAND Social health battery(16–19) and the General Wellbeing schedule(16,19–21) after getting an informed consent. The analysis was done with SPSS v15.

The questionnaire was divided into three parts as general questions, the RAND social health battery and the general wellbeing schedule. In the first part of the questionnaire the data regarding their marital status, educational qualification, occupation, whom they were living with, willingness to work at present, sources of income, availment of beneficiaries from the government, enrolment in social security schemes and status of dependency were asked. In the second part of the questionnaire the questions pertaining to RAND social health battery were asked such as their frequency of getting in touch with their friends and family, frequency of attending religious services and their participation in voluntary groups or organizations. In the third part of the questionnaire questions pertaining to the general well-being schedule was asked and their levels of nervousness, anxiety, stress, feeling of hopelessness, positive well-being, self-control, vitality and general health were assessed.

The RAND Social Health Battery(16,19,22)

The RAND Social Health Battery records resources for social support and the frequency of social interactions and it is intended for use in general population surveys(16,18,22). This instrument forms an overall measure of social functioning which is defined as the ability to develop, maintain, and nurture major social relationships(19). This may be measured in terms of relatively objective behavioural indicators such as the numbers of social resources a person has, or the frequency of contact with friends and relatives(18,19). The 11 items in the questionnaire include predominantly objective indicators covering social resources (eg., number of friends) and contacts (eg., the frequency of seeing friends or involvement in group activities)(19). The scale covers home and family, friendships, social and community life. Forced choice and open-ended responses are used.

The General Well Being Schedule(16,23)

The General Wellbeing Schedule (GWB) offers a brief but broad - ranging indicator of subjective feelings of psychological wellbeing and distress for use in community surveys(23). This scale is designed to assess how the individual feels about his 'inner personal state'. The scale reflects both positive and negative feelings; six dimensions assessed include positive wellbeing, self-control, vitality, anxiety, depression and general health[$]. Each item in the questionnaire has the time frame 'during the last month' and the first 14 questions use 6-point response scales representing intensity or frequency. The remaining four questions use 0 to 10 rating scales(16,20,23).

RESULTS

200 people (100 men and 100 women) from urban and rural areas each were administered the pretested questionnaire. The age distributions of the study participants are majority (73%) were in the 60 to 70 age group. Only 3% of the participants were in the 80 plus age group. The difference is not significant between the urban and rural areas. Around two-thirds were married and only one-third were either widowed or separated. Again, there is no significant difference between the urban and rural cohorts. As far as the educational qualifications are concerned, one third (33%) of the urban participants had no formal education, whereas two-third (67%) of the rural participants did not have any formal education.

Financial dependency which forms a major support for the elderly in previous studies, in this study group we noted that more than 50% were financial independence with a

slightly higher among the rural participants. Seven percent of the participants did not have any social security. More than 80% of the participants are currently not working and their main source of income is either pension or the social security measures like Old Age pension. Of the 33 elderly who are still working, they were working or some financial freedom (72%) and to beat the boredom of sitting at home (28%).

The results of the RAND social Battery gives further insights into the social factors which govern the well being of the elderly. More than half of the participants did not either directly meet their friends and relatives in the last one month (X^2 =7.826 P value =0.05). More than 90% of the urban elderly at least interact with their relatives and friends over phone. However, the percent drops to50% in the rural areas (X^2 = 23.847 P value = 0.000). At least 70% of the urban elderly and 50% of the rural elderly visit any religious place or festivals in the last one month. Almost half of the elderly informed that there is no change in the way they interact with others due to the old age, with no difference observed between the urban and rural participants.

About 70% and 64% of rural elderly men and women respectively were anxious while only 65% and 67% of urban men and women respectively were anxious. About 32% and 36% of rural men and women respectively were depressed while 30% and 31% of urban women were depressed. 48% of the rural men and 48% rural women showed positive well-being while 49% urban males and 46% urban females showed positive well-being. More than 80% of the elderly (both urban and rural) were stressed and they were able to comprehend their reasons about them. When they were asked about the satisfaction about their life, more than 60% were satisfied with life so far. Around 90% of them bothered about their pain and illnesses at least a good bit of time during the last one month.

TABLE 1: Socio-demographic profile of the study population

VARIABLES	RURAL (N=%)	URBAN (N =%)	TOTAL (N=%)
Age group			
60 - 69 years	62	78	140
70 - 79 years	35	19	54
>/= 80 years	3	3	6
Gender			
Male	50	50	100
Female	50	50	100
Marital status			
Married	64	71	135
Widowed / Separated	36	29	65
Educational qualification			
Illiterate	67	33	100
Literate	33	67	100
Financial dependency			
Independent	50	54	104
Dependent	50	46	96
Beneficiaries			
OAP	77	59	136
Widowed pension	5	1	6
Retirement pension	9	35	44
None	9	5	14
Working status			
Working	20	13	33
Not working	80	87	167
Reasons for working			
Financial needs	16	8	24
Boredom at home	2	7	9

Table 2: Summary of the RAND SOCIAL HEALTH BATTERY

VARIABLES	RURAL (N=%)	URBAN (N=%)	TOTAL (N=%)	P value
Frequency of getting together with friends or relatives				
Everyday	9	10	19(9.5)	X^2 =7.826 P value =0.05
Several days a week	12	5	15 (7.5)	
Several times a month	34	45	79 (39.5)	
Not at all in past month	45	40	85 (42.5)	
Frequency of conversation over the telephone				
Everyday	2	35	37(18.5)	X^2 = 23.847 P value = 0.000
Several days a week	20	25	45 (22.5)	
Several times a month	35	34	69 (34.5)	
Not at all in past month	43	6	49 (24.5)	
Frequency of attending religious services				
Everyday	1	3	4(2)	X^2 = 57.941 P value =0.000
Several days a week	5	23	28 (14)	
Several times a month	51	23	74 (37)	
Not at all in past month	43	28	71 (35.5)	
Ability to get along with other people				
Better than usual	9	16	25 (12.5)	X^2 = 2.79 P value = 0.248
About the same	43	35	78 (39)	
Not as well as usual	48	49	97 (48.5)	

TABLE 3: Summary of the GENERAL WELL BEING SCHEDULE (GWBS)

VARIABLES	RURAL(N = %)	URBAN (N = %)	TOTAL (N = %)	Statistics / P value
Feeling of general well being				
Good spirit	44	47	91 (45.5)	X^2 = 0.913 P value = 0.634
Been up and down	25	20	45 (22.5)	
Low spirit	31	33	64 (32)	
Control over behaviour and thoughts				
Yes	68	63	131 (65.5)	X^2 = 0.553 P value =0.552
No	32	37	69 (34.5)	
Feeling of worthlessness				
Very much	22	12	34 (17)	X^2 = 4.171 P value = 0.124
Quite a bit	58	70	128 (64)	
Never	20	18	38 (19)	
Presence of stress, strain/ pressure				
Yes	87	82	169 (84.5)	X^2 = 0.954 P value =0.435
No	13	18	31 (15.5)	
Satisfaction with personal life				
Satisfied	64	64	128 (64)	X^2 = 0 P value = 1
Dissatisfied	36	36	72 (36)	
Presence of worries & anxiety				
Yes	89	94	183 (91.5)	X^2 = 1.607 P value = 0.311
No	11	6	17 (8.5)	
Botheration by illness and pains				
All the time	6	4	10 (5)	X^2 = 1.822 P value = 0.402
A good bit of time	89	94	183 (91.5)	
Never	5	2	7 (3.5)	
Extent of interesting things in daily life				
All the time	1	13	14 (7)	X^2 = 19.48 P value = 0.000
A good bit of time	62	72	134 (67)	
Never	37	29	66 (33)	

Feeling down hearted and blue				
All the time	6	5	11 (5.5)	X^2 = 0.501 P value = 0.778
A good bit of time	78	82	160 (80)	
Never	16	13	29 (14.5)	
Presence of emotional stability				
All the time	11	12	23 (11.5)	X^2 = 4.833 P value = 0.089
A good bit of time	88	81	169 (84.5)	
Never	1	7	8 (4)	

DISCUSSION

Social well-being of elderly living in urban and rural areas of Puducherry is not different despite the significant difference in the literacy levels and economic fronts. Thus, apart from medical care for the elderly there is a need for intervention at the social and family level for elderly friendly environment at home and the community. A growing literature documents the positive effect of social relationships on health, in general, and in reducing mortality, in particular because, health is a strong potential confounder affecting social relationships and risk of mortality(24).

Overall, the social determinants of perceived physical health, amenable for intervention, were their currently working status, not being neglected by the family, and involvement in social activities. The determinants for psychological support were better when the urban elderly had health insurance and their current working status despite their retirement from service further cemented by the pension(25,26). The determinants for social relations were membership in social group and their current working status improves their General Wellbeing to a larger extent as seen in a qualitative study in Northern India(27). The determinants for perceived environment were membership in social groups and their relationship with the family members(6,27,28). It is to be noted that subjective variables among the urban and rural elderly also accounted for improvement in quality of life. Several investigators(29–31) in the West have recognized the importance of subjective evaluation over objective life conditions.

In our study, we found around 50% had financial independence and health insurance among both the urban and rural elderly. This finding may be context specific due to insurance schemes of the Govt. of Puducherry as it is a Union Territory and promotion of savings through various central scheme is promoted even in rural areas(32,33). Despite these measures, the private insurance coverage is minimal among general population in Puducherry(34). Noteworthy, that the insurance and financial support or independence was found to be one of the determinants of psychological support. Hence, health insurance status is likely to contribute to perceived quality of life in RAND scale and their General Wellbeing.

The Perceived physical health differences in mean scores did not differ significantly across different both the urban rural difference. The was no significant gender difference also. This could be mainly due to the increased urbanization of rural areas in Puducherry.

Living arrangements are an important component of analysis of welfare of elderly. In other words, the care and support experienced by the elderly are commonly linked to the place of their residence. However, in the current study, due to increased urbanization of rural areas in Puducherry, no significant differences were observed, in terms of frequency of meeting friends and taking part in religious activities. First generation urban migration and the connection to their rural roots could play a role in this regard(1,5,13). Frequency of communication is often identified as an indicator of closeness among social ties(34). The universal penetration of mobile phones were noted when more than 40 % of the elderly are frequent users of mobile as a mode of communication with friends and relatives(35).

The poor understanding of elderly life under changing economic and social norms in India has led to a weak care and support for them. In India, National Program for Health Care of Elderly (NPHCE) aims to develop infrastructure and built capacity of health care providers for elderly health care, around the world, there is growing concern to achieve sustainable quality of life(4,6,27). The concept of “active aging” has also fostered interest in the well-being and life satisfaction dimension; however, the definition of quality of elderly life and its determinants remained a concern.

Ethical Considerations of the Study:

Ethics committee approval was received for this study from the Institutional Ethics Committee. Written Informed Consent was obtained from concerned subjects and authority of institutions. Privacy, confidentiality and anonymity were granted. Scientific objectivity was maintained with honesty and impartiality.

Conflict of Interest:

The authors declare that this study has had no conflicts of interest.

Financial Disclosure:

The authors declare that this study had received no financial support.

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