Original Article

Old Age Pension for Elderly in Rural Puducherry: Utilisation for Health and Quality of Life

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Abstract

Context: Elderly population is increasing in India with higher proportion in rural areas. Old age pension is one of the way society supports the elderly.

Aims: To understand how the Indira Gandhi National Old Age Pension Scheme (IGNOAPS) money is being utilized by the rural elderly in relation to their health problems and Quality of Life (QOL).

Settings and Design: A community based cross sectional descriptive study in village Thondamanatham of Puducherry among elderly (>60 years).

Material and Methods: Interviews were conducted at home of the elderly using a structured questionnaire with socio-demographic variables, morbidity details, ways IGNOAPS money was spent and QOL. The QOL was measured using the WHO QOL BREF questionnaire.

Statistical analysis used: Socio-demographic characteristics were presented as percentages and WHO QOL scores as mean $\pm$ SD. Chi-square test was done to find the association between socio-demographic variables and opinion about sufficiency of IGNOAPS money.

Results: 98% of the elderly were beneficiaries of IGNOAPS and 81% felt that OAP money was not sufficient. Only 1/10th of them used the money for health (medicines). QOL was better among those elderly who utilized the money to buy medicines compared to those who did not.

Conclusions: The proportion of elderly spending OAP money on health is lesser than in other states of India. QOL was better among those elderly who utilized the money to buy medicines compared to those who did not.

Key words: Old age pension, elderly, rural area, utilization.

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Introduction

Old age is the time in life when the physical capabilities wane and morbidities increase. This is also the time when people become dependent on others because of their loss of earning aggravating their deprivation and increasing vulnerability. The proportion of elderly in India has risen from 5.3% in 1961 to 7.5% in 2011, which is about 76 million people above the age of 60 years.

According to a situation analysis of elderly in India in 2011, about 65 per cent had to depend on others for their day-to-day maintenance.[1] Poverty complicates the problems of elderly. According to a World Bank estimate, the number of people in India living below poverty line ($ 1.25/day) increased

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from 420 million in 1981 to 455 million in 2005.[2] Most of India's poor are in rural areasand so also the elderly.[3] According to NSSO (2007-08), the percentage share of elderly in rural areas was 7.6 compared to 7.2 in urban areas of India.[1] With the trend towards nuclear families and rural to urban migration, the rural elderly face severe hardships. Of the financial needs of the elderly, a major need is for expenditure on health as chronic health problems ail almost all elderly. In a survey of 6560 persons (aged 50 years and over) from six Indian states, it was found that older population from rural areas is more likely to experience poorer health status and higher disability.[4]

It is the society's responsibility to take care of the health and wellbeing of elderly, as they are no longer able to fend for themselves. To improve their Quality of Life (QOL), one important way the society contributes is by providing financial security. Based on this philosophy of the social security system, the Government of India adopted the National Old Age Pension Scheme (NOAPS), one of the three schemes under the National Social Assistance Programme (NSAP) in 1995-96. The other schemes under the programme were the National Family Benefit Scheme (NFBS) and the National Maternity Benefit Scheme (NMBS). The programme underwent modifications in 2002-03 and currently, NSAP comprises of five schemes, with the renamed Indira Gandhi National Old Age Pension Scheme (IGNOAPS).[5]

The eligibility for IGNOAPS is that the elderly should belong to a BPL family. The age eligibility for IGNOAPS has been reduced to 60 years from 65 years with effect from 1st April, 2011. The amount of pension has also been increased to Rs. 500 per month from Rs. 200. But at present, old age beneficiaries are getting any-where between Rs. 200 to Rs. 1500 depending on the state contribution.[5]

IGNOAPS aims to improve the QOL of the elderly which can be achieved through multiple ways. One major contributor to the QOL of the elderly is physical health. Financial assistance can bring improvement in health status of the elderly by making them capable of expending in required health matters. Therefore, knowledge about how the IGNOAPS money is utilized, especially its utilization for health related problems and its association with their QOL is useful to understand the situation of elderly. There have been studies to evaluate the IGNOAPS and utilization of the pension as part of economic surveys in some states. In a qualitative research conducted in Mandla district of Madhya Pradesh and Unnao district of Uttar Pradesh, IGNOAPS was reported to have improved the quality of life (QOL) of the elderly but association of the health expenditure of IGNOAPS money with QOL was not studied.[2]

Puducherry, a Union Territory in the south-eastern coast of India, performs well in terms of socio-economic and health indicators and has HDI ranking of sixth among all the states and Union Territories of India.[6] In Puducherry, the pension amount is Rs. 1100 per month. The state has a well-managed system of disbursement of this pension fund through the Anganwadi centres. An ICMR project was conducted in a village of Puducherry on feasibility of running a Day Care Centre for the elderly. This study is part of that project to find out how the IGNOAPS money is being utilized by the elderly and its relationship to their health problems and Quality of Life in this village.

Material and Methods

The village Thondamanatham, with a population of 3600, is one of the villages under the service area of Rural Health Centre of a medical college hospital. There are about 290 elderly in this village according to the voters list constituting about 8% of the population. The major occupation in this village is agriculture and scheduled castes comprise of 28.3% of the population. The eligibility for the IGNOAPS in Puducherry has been reduced to 55 years. The total number of beneficiaries under the scheme in this village was 486. But to have uniformity across all populations, the present study included elderly, those fulfilling the criteria of 60 years and above as per United Nations definition.

This was a cross-sectional descriptive study done using a structured questionnaire with questions on the ways IGNOAPS money was spent by the elderly. Interviews were conducted at the homes of the elderly by trained project staff after obtaining informed consent from the participants. The socio-demographic variables, morbidity details and Quality of Life (QOL) assessment were also included in the questionnaire. QOL was measured using the WHO QOL BREF questionnaire. The raw scores were calculated from the responses and then transformed into scores out of 100. Data was entered in to MS Excel and analysed using IBM SPSS v 20. Age was categorized as young old (60-69), old old (70-79) and oldest old ($\geq$80).[7]

Results

Many elderly though registered in this village were staying with their children and relatives in other places. Of the total elderly population, 242 individuals were present at the time of the study.

All of them consented for the study and responded to most of the questions during the interview. There were more females (65%) than males (35%) (Table 1). Age wise there were more females especially in the old old age group. The proportion of widowed women was much higher than the widowers. More elderly men were employed and had received higher levels of education. The most common occupation among this population was agriculture. Gender distribution within each of the categories of income was not very different. A much higher proportion of elderly females were living alone (85%) compared to men.

Table 1. Socio-demographic details of the study population.

	Categories	Gender		Total n (%)
		Male n (%)	Female n (%)	
Age in years	60-69	49 (36.8)	84 (63.2)	133 (55)
	70-79	26 (32.1)	55 (67.9)	81 (33.5)
	≥80	10 (35.7)	18 (64.3)	28 (11.6)
	Total	85 (35.1)	157 (64.9)	242 (100)
Marital status	Married	77 (53.5)	67 (46.5)	144 (59.5)
	Widow/ widower	8 (8.2)	89 (91.8)	97 (40.1)
	Never married	0 (0)	1 (100)	1 (0.4)
	Total	85 (35.1)	157 (64.9)	242 (100)
Employment	Unemployed	40 (22)	142 (78)	182 (75.2)
	Employed	45 (75)	15 (25)	60 (24.8)
	Total	85 (35.1)	157 (64.9)	242 (100)
Education	Illiterate	30 (20.3)	118 (79.7)	148 (61.2)
	Primary (1 to 7)	30 (50)	30 (50)	60 (24.8)
	Secondary and above	25 (73.5)	9 (26.5)	34 (14)
	Total	85 (35.1)	157 (64.9)	242 (100)
Per capita income	<935	27 (36)	48 (64)	75 (31)
	936-1560	25 (29.8)	59 (70.2)	84 (34.7)
	>1560	33 (39.8)	50 (60.2)	83 (34.3)
	Total	85 (35.1)	157 (64.9)	242(100)
Total number of family members	1	6 (15)	34 (85)	40 (16.5)
	2-5	58 (36)	103 (64)	161 (34.7)
	≥6	21 (51.2)	20 (48.8)	41 (16.9)
	Total	85 (35.1)	157 (64.9)	242 (100)

The most common health problem among this group was related to the musculoskeletal system. The complaints were joint pains especially in the knee joint. The next common problem was poor vision. Nearly half of the elderly suffered from disturbances in sleep and also complained of tremors, dizziness, headache, syncope and weakness (neuropsychiatric problems). Almost 30% had cardiac diseases and hearing loss (Table 2). The prevalence of self-reported hypertension and diabetes mellitus were 23.9% and 16.5% respectively. About 12.4% reported to have both.

Table 2. Morbidity status of the study population

Conditions	n	%
Musculoskeletal diseases	179	74
Poor vision	161	66.5
Sleep disorders	117	48.3
Neuropsychiatry diseases	116	47.9
GI diseases	87	36
Cardiac diseases	76	31.4
Hearing loss	70	28.9
Respiratory diseases	64	26.4
Urinary problems	50	20.7
Skin diseases	30	12.4

As per the WHO QOL, the mean scores of these elderly were 38.43 + 12.002, 48.55 + 25.6, 36.83 + 14.12 and 39.53 + 9.61 in the psychological, social, environmental and physical domains respectively, the highest being in the social domain followed by physical domain.

Almost all elderly among the study population received Old Age Pension (OAP). Only four, two males and two females did not (Table 3). Of these four, one male belonged to the income category of <935, one female in 936-1560 and 2 (one male and one female) in the >1560 PCI.

Table 3. Beneficiaries of OAP.

Age	Males			Females		
	Yes	No	Total	Yes	No	Total
60-69	49	-	49	82	2	84
70-79	24	2	26	55	-	55
≥80	10	-	10	18	-	18
Total	83	2	85	155	2	157

A very high proportion of the elderly opined that the OAP they received was not sufficient. This was almost uniform across age groups, higher among those who had more than 6 members in the family, were employed and having lesser per capita income (PCI). Among these, the association with the PCI was significant, X2 =9.529, p=0.049 (Table 4).

Table 4. Perception of sufficiency of OAP.

	Categories	Not sufficient n (%)	Sufficient n (%)	Total n(%)
Age	60-69	106 (80.9)	25 (19.1)	131 (55)
	70-79	63 (79.7)	16 (20.3)	79 (33.2)
	≥80	24 (85.7)	4 (14.3)	28 (11.8)
	Total	193 (81.1)	45 (18.9)	238 (100.0)
Employment	Unemployed	142 (79.3)	37 (20.7)	179 (75.2)
	Employed	51 (86.4)	8 (13.6)	59 (24.8)
	Total	193 (81.1)	45 (18.9)	238 (100.0)
Per capita income	<935	67 (90.5)	7 (9.5)	74 (31.1)
	936-1560	68 (81.9)	15 (18.1)	83 (34.9)
	>1560	58 (71.6)	23 (28.4)	81 (34)
	Total	193 (81.1)	45 (18.9)	238 (100.0)
Total number of family members	1	32 (80)	8 (20)	40 (16.5)
	2-5	126 (80.3)	31 (19.7)	157 (66)
	≥6	35 (85.4)	6 (14.6)	41 (16.9)
	Total	193 (81.1)	45 (18.9)	238 (100)

Of the 242 elderly in the study, 238 who received the OAP were asked about how they used the money. Twenty-four of them were not willing to share the information. Half of the elderly used the money received from the OAP for family expenses. Seventeen percent used it specifically for food. Only 9.2% managed the expenditure incurred on medicines with this money. Some also used it for their grand children (Table 5). For the expenditure on medicines, major share was for chronic conditions. Of the 22 persons who utilized the money for purchase of medicines, four had hypertension, two had diabetes and two had both diabetes and hypertension. Fourteen of them had none of these two conditions and used the money to buy medicines for other problems. Among the 68 of all elderly who had diabetes and/or hypertension, only eight used the money to buy medicines and most (29 elderly) spent it on family expenditures. On trying to assess the differences in the QOL among those who spent their OAP on their health care compared to those who did not, we found the mean QOL scores were better, though not statistically significant, in the psychological (39.00 vs 37.99), social (50.77 vs 47.49) and environmental domains (40.73 vs 36.11) among those spending their OAP on medicines. In the physical domain, the mean score was better in the group not utilizing OAP for purchase of medicines (38.77 vs 39.51) but this difference was statistically not significant.

Table 5. Utilisation of OAP (n=238)

Purpose	n	%
Family expenses	123	51.7
Food	41	17.2
Medicines	22	9.2
Personal use	18	7.6
Grandchildren	8	3.4
Travel	2	0.8
Not willing to share	24	10.1
Total	238	100.0

Discussion

In this study population of rural elderly, there were more women (64.9%), majority of whom were widowed (56.6%), illiterate (75.1%) and unemployed (90.4%). The most common ailments were related to musculoskeletal system and poor vision. Many also had neuropsychiatric (48%) and cardiac (31%) diseases. All except four were beneficiaries of IGNOAPS. Of the non-beneficiaries, one male in the lower income group (PCI< Rs 935) and one female in the middle income group (PCI Rs 936-1560) would definitely benefit from the scheme. The profile of the beneficiaries in this village was

similar to the beneficiaries of IGNOAPS in the neighboring state of Tamil Nadu where 66% were women, 60% of them being widows, 77% were illiterate and 20% of them had hypertension.[8] About 40% of them had bones related problems whereas 74% of our study elderly had musculoskeletal problems. The higher proportion may be because we included muscular problems along with bones, as it is difficult to differentiate both by the elderly. Similar problems of poor eyesight, joint problems and cough were found in Mandla and Unnao districts of Madhya Pradesh and Uttar Pradesh respectively.[2]

The money given under IGNOAPS in different states in India varies. In Puducherry, the amount was Rs. 1100 at the time of this survey. In Tamil Nadu, it was Rs 1000 as reported by Chathukulam et al, in Chattisgarh it was Rs 300 whereas in Jharkhand it was Rs. 400 as reported by Gupta.[8,9] The variations in the amount received by the beneficiaries can cause a difference in the ways of expenditure and its impact on the QOL of the elderly. However, regarding the use of the OAP money, in Mandla district of Madhya Pradesh, the elderly said that 3/4th of the money was utilized for household expenditures (food and personal supplies) and 1/4th on health, whereas in Unnao district of Uttar Pradesh, 2/3rd was health related expenditure and 1/3rd was household.[2] In our study, majority spent it for family expenses (51%). On dichotomizing the expenditure as on health (medicines) and others, only 1/10th had spent it on health and rest 90% mostly on family and food. The pattern of expenditure is different probably because of very good public health facilities in Puducherry. Most health related needs of the elderly are taken care of by the Primary Health Centres (PHC). Even then 81% of the elderly opined that the given amount is not sufficient for their needs. Another scenario may exist where the family is forcibly taking the money from the elderly for family expenses, and therefore there is a feeling of insufficiency as only around 8% were spending the amount for personal needs. Higher proportions of those with larger families and belonging to lower economic class expressed insufficiency. Though the proportion of elderly who were still employed was lesser than the national average (52.9% vs 66% in men and 9.5% vs 23% in women), greater proportion of those still working expressed insufficiency.[1] This may be due to the fact that poverty and greater family needs force the elderly to go to work to supplement the OAP money.

In an attempt to understand the relationship of ways of expenditure of OAP and the QOL of the elderly, WHO QOL scores of the elderly in the village Thondamanatham was studied. Overall the highest scores were in the social domain indicating the still strong social support system in rural areas. The QOL scores in the environmental domain were significantly higher among those who said OAP was 'sufficient' compared to those saying 'not sufficient'. Elderly belonging to upper economic class would definitely have better environmental conditions as significantly higher proportion of the elderly from higher economic class also said OAP amount to be sufficient. Relationship of expenditure pattern and QOL was found as the mean QOL was higher in those utilizing the money for purchase of medicines compared to others. It may have been possible to spend on medicines as other basic needs of food and family were met. These elderly might have been economically better. In the physical domain, the QOL score was better in the group not utilizing this money for medicines. This meant that those who used OAP for purchase of medicines were also sicker than those who did not.

Conclusion

From this study the proportion of elderly spending their OAP money on health is lesser than in other states of India. In the village Thondamanatham, 98% of the elderly were beneficiaries of IGNOAPS. Though 81% of them said that the OAP money was not sufficient, their expenditure pattern showed that only 1/10th of them used the money for health (medicines) compared to 1/3rd or 3/4th in other states. With better health infrastructure and services in Puducherry, elderly have easier access to medicines. Though the QOL was better among those elderly who utilized the money to buy medicines compared to those who did not, the relationship may be confounded by many variables. This was a descriptive study done in only one village in Puducherry to get an insight into the influence of IGNOAPS on the lives of elderly from health perspective. With the increasing number of elderly in Indian population further research is required to understand the dynamics of the relationship of IGNOAPS and health among elderly.

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