The Health Status of Elderly and Their labour Force Participation in Selected States of India: a Multivariate Analysis

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Introduction:

One of the major features of demographic transition in the world has been the considerable increase in the absolute and relative numbers of elderly people. This has been especially true in the case of developing countries like India where ageing is occurring more rapidly due to decline in fertility rates combined by increase in life expectancy of people achieved through medical interventions. As of 2004, India accommodates 75 million elderly people, second only to China. Therefore, the economic, health and social security conditions of Indian elderly are issues of great concern.

As India spends very little for the social security programme, a substantial proportion of the elderly continue to work in old age not only to support them but also to support their families.

The analysis of the raw 1999-2000 National Sample Survey data shows that 63 percent of men and 58 per cent of women continue to work and are economically active beyond the age of 60.

Although there are a host of factors affecting labour force participation among the elderly, a number of studies (Ogawa et al, 1994,Zabala et al, 1980; Boskin, 1977) show that the health status of the aged plays an important role in determining whether or not they participate in the work force. As people suffer from chronic diseases and different types of disabilities in the old ages their labour force participation is severely affected.

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This paper tries to examine the nexus between the labour force participation and health status.

In a demographically diversified country like India where some of the states are still facing the problem of population explosion other states (like Kerala, Tamil Nadu, Punjab, Maharashtra) have considerably reduced their fertility and coupled with tremendous improvement in mortality the proportion of people in the 60+ age group has been on rise. Therefore it would be worthwhile to study - how health status of the older people affects labour force participation in those states.

Objectives:

Though the broad objective will be to study the relationship between the health status of elderly and their labour force participation, the specific objectives are

(1) To study the pattern of morbidity prevalence and disabilities among the elderly for the states of Kerala, Tamil Nadu, Maharashtra and Punjab.

(2) To study the work participation of elderly by different background characteristics like age, sex, education, economic status etc. and

(3) To study the nexus between health status and labour force participation of elderly.

Data:

Data collected by the National Sample Survey (NSS) and Census 2001 will be used for this study.

The 52nd round of the NSS provides data on the *morbidity patterns, use of medical facility, hospitalization* and related details for the general population for 1995-96. This part of the survey will be used to extract data for the elderly. In addition, there is special module on the elderly, which provides data on various aspects of the elderly. There is also information on physical immobility, disability, current state of health, relative state of health, ownership and management of property belonging to the aged etc. Both these modules will be extensively used for this paper.

As Census gives information on work participation rates by different age groups, it will be used in this analysis.

Methodology:

Though the respondents were asked to evaluate their health status in four response categories, (1) excellent, (2) very good, (3) good/fair and (4) poor (i.e., the subjective assessment of health) the morbidity prevalence rate and disability rate will be calculated for their objective assessment of health.

The 52nd round (1995-96) of National Sample survey (NSS) asked the individuals to report their usual activity in terms of the following response categories: (1) self employed in 'agriculture', (2) 'non-agriculture', (3) 'regular employee', (4) casual labour in 'agriculture', (5) 'non-agriculture', (6) 'unemployed', (7) 'student', (8) engaged in 'domestic activities', and (9) 'others'. Categories 1,2,3,4,5 and 9 will be combined to make a new category of 'employed' and similarly rest of the categories will be merged to get the category of 'unemployed'. This variable will be used as a labour force participation variable. To understand the factors determining whether or not an elderly person stays in the labour force, a logit regression model will be conducted by introducing a variety of plausible explanatory variables into the participatory equation. The dependent variable is dichotomous; it takes a value of 1 if an old person participates in labour force and 0 otherwise. The independent variables include –(1) sex, (2) age, (3) marital status, (4) caste, (5) education, (6) current place of residence, (7) number of living children, (8) household monthly consumption expenditure, (9) ownership of property and (10) health status.

Preliminary Analysis:

Table 1: Labour Force Participation Rate of the Elderly by Age, Sex, Marital Status, Health Status and Place of Residence in Kerala, Maharashtra, Tamil Nadu and Punjab in 1995-96. (per cent working)

Respondent's Characteristics	**Kerala[a]**	**Maharashtra[b]**	**Tamil Nadu[c]**	**Punjab[d]**
Age				
60-69	28.7	41.1	44.2	29.3
70-79	17.9	20.7	25.3	20.6
80+	3.9	6.9	12.5	6.1
Sex				
Male	42.0	47.5	49.1	43.7
Female	7.5	18.0	21.2	2.0
Marital Status				
Currently married	31.6	42.8	44.3	29.0
Currently unmarried[k]	10.5	17.6	24.2	12.8
Health Status				
Excellent	25.0	53.7	64.4	83.3
Very good	30.4	38.9	45.6	34.7
Fair/good	26.3	36.5	36.8	26.1
Poor	11.5	8.5	16.0	8.2
Place of residence				
Urban	14.4	20.3	27.7	24.1
Rural	28.5	45.0	45.4	22.7
All	22.9	32.5	35.8	23.3

a = 2212, b = 3206, c = 2190, d = 1315 and k includes never married, widowed, divorced and separated.

The above table compares labour force participation rates of the elderly in four states by respondents' characteristics. It clearly indicates that the probability of older persons being in the labour force varies considerably with their demographic and socio-economic characteristics. The labour force participation rate declines with an increase in age in all the four states and are higher among men than among women. Rural elderly persons show a higher participation than their urban counterparts. The persons who are currently married have greater probability to remain in the workforce.

Further analysis is in progress.

Expected Findings:

The elderly with good health have a higher propensity of being in the work force, compared with those having poor health. The propensity to participate in the work force tends to decline with age irrespective of their health status. The male elderly are more likely to work than their female counterparts. Those who are currently married compared with those not married have higher possibility of being in the labour force. The elderly living in urban areas have a substantially lower likelihood of working than those in rural areas. Elderly persons having more number of living children are less likely to work. The elderly from lower economic strata have a higher probability of being in the work force.