

DISEASE AND DISABILITY BURDEN OF ELDERLY WOMEN IN INDIA

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INTRODUCTION

From the beginning of the 20th Century, almost all nations of the world have noted an increase in the life expectancy of their people. This transition in the health scenario has occurred at different rates in different countries. The developed regions have added more years to the lives of their people than the developing ones. Further, these changes have not been uniform for all people. For example, the female life expectancy has been rising continuously, while the gains in the case of males have slowed significantly, and in some cases have even leveled off. The gender differentials in the pace of change in life expectancy were also affected differentially, in different regions. In several countries (mostly in the developed world), where male and female life expectancies were similar, females have acquired an edge. In countries where females had a lower life expectancy than men (largely in developing countries), gender gaps have narrowed. Demographers have anticipated that with the continuation of the current trend in developing countries the gender gap will widen again, but with an advantage to women.

As individuals live longer, the quality of that longer life becomes a crucial issue. Are the additional years gained healthy and productive years, or are these spent with disability, ill-health, misery and mental disorder? Against the backdrop of a higher longevity, this issue becomes particularly relevant for women. It is noted that in many developing countries, women generally have unequal and inadequate access to basic services, food and nutrition throughout their lives. In several poor households and communities women work harder than men, but eat less. These factors along with neglect and discrimination during child-bearing years lead to chronic health problems for them in old age. Under these circumstances, it is

believed that women may live additional years in ill-health (UNFPA; 1998). This assumption is based on the behaviour of particular biological factors that lead to a higher disease and disability burden among women in old age and, which are further exacerbated by life-long discriminating treatment against them. For example, women may have adverse physical effects of changing hormonal levels after cessation of menses. These include increased risk of heart disease, osteoporosis, and an acceleration of the changes in skin, muscles and other tissues associated with aging. The risk of reproductive tract infections increases due to the drying and thinning of vaginal walls. Psychological changes include a loss of sexual appetite and pleasure, mood and depression. These are also influenced by changing social identities and self-perception. For the past few decades, research has been moving towards the development of health indices that take into account not only mortality but also various parameters of health. Though in real terms, healthy life expectancy is not necessarily expectancy free of diseases, such as hypertension, the concept of healthy life expectancy as normally used, refers to expectancy without limitation of function that may be the consequence of one or more chronic disease conditions (Kinsella et. 1993). However, these assumptions require detailed or longitudinal data that are currently not available for many developing countries including India.

DATA

This paper attempts a comparative analysis of disease and disability burden of elderly men and women in India on the basis of data drawn from several large scale surveys and censuses.

It is a macro analysis based on data drawn from National Family Health Survey (NFHS): 1992-93, National Sample Survey (NSS) of 1986-87 (42nd

round) and 1995-96 (52nd round), Sample Registration Scheme (SRS) and Indian Censuses etc. Further, elderly or aged persons have been defined as those who have completed 60 years or more of life. This definition of the aged could be debated because, in many developed countries, persons aged 65 or above are defined as aged. The above age limit is decided on the basis of prevailing norms in India. It in turn is determined by the retirement age applicable in the formal or organized sector. Further, in most surveys in India, persons of 60 years and above are considered as elderly.

The data sources mentioned above provide large cross-sectional community based data. The 42nd and 52nd rounds of NSS have specifically collected information on the socio-economic and health status of the elderly by surveying one percent of all households in India. Though the NFHS focused on collecting information on reproductive and child health care from nearly 100,000 households across the country, it has also generated valuable information on the disease and disability burden of the elderly in these households. In the present analysis, the focus is on comparing aspects of

physical well-being of the elderly. The variables used include

- (a) Nature of physical disability (disability burden)
 1. Visual
 2. Hearing
 3. Locomotion
 4. Amnesia
 5. Speech
 6. Any disability
- (b) Type of diseases (chronic diseases)
 1. High Blood pressure
 2. Problem / pain in joints
 3. Cough
 4. Heart disease
 5. Other diseases

ANALYSIS

I. Growth Pattern

As per the 1991 census of India, there were 57.19 million people in the elderly age group of 60+ years. In proportionate terms, this accounts for 6.8 per cent of India's total population (Table 1).

Table 1: Number and Proportion of Aged (60+) in India: 1961-1991 (Numbers in million)

Sex	Census Year			
	1961	1971	1981	1991
Male				
i. Number	12.36	16.87	22.02	29.63
ii. Percent	5.6	5.9	6.2	6.7
Female				
i. Number	12.35	15.83	21.14	27.56
ii. Percent	5.9	6.0	16.4	6.8
Total				
i. Number	24.71	32.7	43.16	57.19
ii. Percent	5.6	6.0	6.3	6.8

Sources: Registrar General and Census Commissioner of India, State Profile, 1991, India.

Table 2: Projected figures of aged (60+) Population in India: 1996-2016 (In millions)

Year	Males	Females	Persons
1996 No. Percent	32.32 (6.67)	29.99 (6.67)	62.32 (6.67)
2001 No. Percent	36.21 (6.91)	34.36 (7.03)	70.57 (6.97)
2006 No. Percent	41.83 (7.41)	39.99 (7.55)	81.81 (7.48)
2011 No. Percent	48.86 (8.05)	47.06 (8.23)	95.92 (8.44)
2016 No. Percent	57.36 (8.84)	55.60 (9.05)	112.96 (8.94)

Source: Census of India: 1991: Population Projections for India and States 1996 - 2016, Registrar General India, New Delhi 1996.

The table indicates that in absolute terms, the number of aged persons has grown rapidly during the inter-census period. But their share in total population has risen from 5.6 percent in 1961 to 6.7 percent in 1991, only.

According to official projections, this number will rise to 112.96 million by the year 2016, making it 8.94 percent of total population (table 2).

Table 2 also indicates that the number of the aged is likely to increase by 107 percent over the 25 years period of 1991-2016, while during this period the total population is projected to increase by 49 percent only (Visaria: 2001).

II. Expectancy of life

In India, the process of mortality decline, particularly the infant and child mortality, began in the 1920's. The average length of life of an Indian child in the

1930's was 30-32 years, with the males enjoying anomalous advantages relative to females. It has risen to over 60 years in 1991 with females enjoying an advantage of more than one year over males. The official population projections for the ninth five year plan envisages an increase in life expectancy at birth from an estimated 62.4 years during 1996-2001 to 67.0 during 2011 - 2016 for males. The corresponding values for the females are assumed to be 63.4 and 68.8 years respectively (Visaria: 2001).

Though the Indian experience of mortality decline broadly conforms to the pattern of UN model life tables, the elderly seem to have a slower increase in their life expectancy. Visaria (2001) notes ".....The South Asia pattern of model life tables, for example, implies that with a female life expectancy of 75 years at birth, the expected length of life at age 60 would be 21 years. (However) according to the SRS life table for females 1991-95, Kerala is the only state

in India, which conforms to this pattern. With an expected length of life at birth of 75.6 years, Keralese women aged 60 on an average can expect to live for 20.6 additional years. In the country as a whole as well as in most states, the increase in the length of life of the Indian elderly has been quite slow.

Several explanations could be offered for this phenomenon. Firstly, advantages of mortality decline in India have so far been accrued to younger children of under 5 years. Public health interventions for the elderly have been limited, or their impact has not yet contributed to lengthening of life expectancy of the elderly. Secondly, society and the younger generation are not ready or equipped to cope with an increase in dependency burden of the elderly and in spite of increase in number, there is little change in the provisions for them (Goyal: 1997).

III. Disease and Disability Burden

Table 3 presents a comparative analysis of prevalence of chronic diseases among elderly men and women at two points of time. The data are drawn from 42nd and 52nd rounds of NSS, and present self-reported prevalence. (Though in self-reporting of symptoms, a tendency of over-reporting has been noted, comparison at different points of time or across sub-groups of population may neutralise this phenomenon and reflect true prevalence).

The table shows that the overall reporting of illness has indicated an increasing trend during 1986-96. In 1986 about 45 percent of rural and 44 percent of urban males reported that they were suffering from a chronic ailment. In 1996, their proportion grew to about 53 percent. Similarly, in 1986 about 45 percent

Table 3: Percent of Aged Reporting some Chronic Disease According to NSS: 1986-87 and NSS: 1995-96

TYPE OF DISEASE					
Category and Year	Any disease	Heart problems	Pain/problems in joints	Cough	High Blood Pressure
RURAL Male					
1986-87	45	3	45	36	6
1995-96	53	4	36	25	11
Female					
1986-87	45	3	51	33	7
1995-96	51	3	40	20	10
URBAN Male					
1986-87	44	3	35	26	17
1995-96	53	3	28	18	20
Female					
1986-87	46	2	44	22	19
1995-96	58	2	39	14	25

Source: NSSO (1991) Sarvekshana Vol. XV No. 2 Issue 49 & NSSO (2000) Saveshana Vol XXIII No. 3 Issue 82, Ministry of Planning, Gol, New Delhi.

rural and 46 percent urban women had a chronic ailment. This proportion increased to 51 percent and 58 percent respectively in 1996.

However, when it comes to specific conditions the pattern of change is mixed. For pain/problem in joints (arthritis) and cough (two most common health problems), there is a declining trend. The proportion of persons suffering from high blood pressure has however increased. The figures for persons suffering from heart problems remained static and ranged between 2 to 6 percent.

Table 3 also notes large rural urban differences in the intensity and pattern of prevalence of major chronic conditions. Firstly, the overall reporting of illnesses was higher among rural people as compared to their urban counterparts.

Further, arthritis and cough were more common among the rural aged than the urban ones. On the other hand a blood pressure problem was quoted by a large number of urban residents.

One of the important findings of Table 3 is the absence of gender specific differences in the prevalence of chronic diseases in old age. Though general reporting was somewhat higher among women, when it comes to specific diseases, prevalence was invariably higher among males. This phenomenon is particularly visible for two

prominent problems of old age i.e. arthritis and cough. Further, this pattern remained unchanged during the decade (1986-96) under observation.

A somewhat similar pattern was noted in the data from NFHS (1992-93) on the prevalence of certain chronic diseases. This survey indicates that a larger proportion of men were reportedly suffering from cough, TB, and malaria than the women. Women had a higher prevalence of joint problems. The difference between the burden of these diseases on men and women was however, very small.

Table 4 presents the analysis of the level of physical disability among elderly persons. Incidentally, these details were not collected in the 1986 survey.

The data in Table 4 indicate that more than one third of the elderly were reportedly suffering from one or other disability. Poor eye sight followed by hearing impairment are the commonest reported disabilities. Locomotion and amnesia (senility) were reported by 6 to 12 percent of elderly persons. Speech impairment was relatively less common. Further, reporting of general disability was more in rural areas than in the urban ones, while specific impairments were reported more by the urban residents.

Table 4 also indicates that though the reporting of physical impairments was somewhat higher among females than males, the difference between the two

Table 4: Percent of Aged Reporting Physical Disability in India in NSS: 1995-96

Category	Any Disability	Visual	Hearing	Locomotion	Amnesia/ Senility	Speech
Rural						
Male	38	25	14	11	10	3
Female	42	29	16	12	11	4
Average	40	27	15	11	10	4
Urban						
Male	33	22	11	8	6	3
Female	36	26	13	9	8	3
Average	35	24	12	9	7	3

Source: NSSO (2000) Sarveshana Vol. XXIII no. 3 Issue 82. Ministry of Planning, Govt. New Delhi.

was not significant. Only in the case of visually handicapped women was the disadvantage noteworthy.

Data generated by NFHS (1992-93), however, report a distinct male disadvantage in disability burden. Two disability parameters i.e. partial blindness and impairment of limbs show a greater challenge for elderly men than women. Importantly, in all the three elderly age groups (60-69, 70-79, 80+) a similar pattern has been noted. Prevalence of complete

blindness was somewhat higher among women in the 80+ age group (IIPS: 1995).

DISCUSSION

The absence of gender specific differentials in disease and disability burden of the elderly, particularly in the backdrop of a life-long deprivation and discrimination against women in the provision of nutrition, health care etc. raises several questions. Firstly, what are the possible reasons for this

**Table 5: Living Arrangement of Aged in India: 1986 & 1996
(Percent Distribution)**

Area and Category	Type of Living Arrangement				
	Living Alone	Living with Spouse only	Living with Spouse and other members	Living with children	Living with others
Rural Male					
1986	12	-	45	37	6
1996	2	14	75	18	4
Females					
1986	1	-	25	66	7
1996	6	8	39	48	6
Persons					
1986	8	-	37	49	6
1996	4	11	57	33	5
Urban Male					
1986	10	-	45	40	6
1996	3	10	75	18	4
Females					
1986	1	-	22	67	10
1996	6	6	35	51	6
Persons					
1986	6	-	35	51	7
1996	4	8	55	35	5

Source: NSSO (1991) Sarvekshana Vol. XV No. 2 Issue 49 & NSSO (2000) Saveshana Vol XXIII No. 3 Issue 82, Ministry of Planning, Govt. New Delhi.

phenomenon? The pattern observed for India is quite close to the one observed in the WHO study of 12 developing countries. It notes a longer healthy life expectancy for women in 10 out of 12 countries (except in Tunisia and Egypt) (Kinsella: et.1993). Several developed countries also depict a similar pattern.

In the context of India, possible explanations could be found in the socio-cultural domain of society. In spite of discrimination and neglect, the family institutions provide protection and care particularly, to elderly women. Further, in Indian society, transition to old age provides new opportunities and status to women. They exercise more power in the household as mothers-in-law or grandmothers than they did as younger women. Data on living arrangements of the elderly endorse this point.

Table 5 indicates that relatively a larger proportion of elderly females are either living with children or with spouses along with other members (i.e. children). Though, during the decade 1986-96, a decline has been noted in the proportion of women living with children, it features in the category

“living with spouses and other members i.e. children”. In other words, most elderly women in India continue to live in an environment where they are cared for.

The second question that merits attention is about the future directions. Present analysis shows that the quality of life (in terms of free from problems particularly pain in joints and cough, two major conditions of old age) of the elderly in India has either remained the same or showed improvement during the decade 1986-96. Further, the disability burden due to locomotion and senility, the two crippling problems of old age, is low. It is also evident that in spite of disadvantages in early life (which could have adversely affected their health), elderly women enjoy health status similar to men. Against a backdrop of continuously improving life expectancy of women (as compared to men), it could mean that India is well on the path of the trend observed in developed countries, i.e. a higher healthy life expectancy for women. But this interpretation may be read with caution, as more data, particularly longitudinal data, are required to substantiate it.

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