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LIFE EXPECTANCY AT BIRTH AMONG SOCIAL AND ECONOMIC GROUPS IN INDIA

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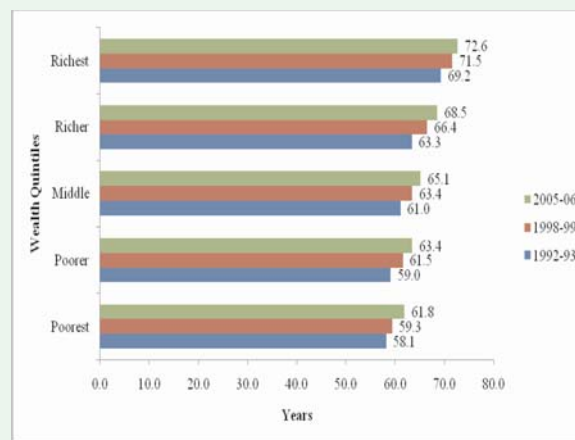
Introduction

Life expectancy at birth, a summary measure of health, is the most popular and widely used indicator cutting across the disciplines; among academia, planners, policy makers and international organization. It represents the dimensional index of health in the human development index. However, this indicator is usually provided at national and sub-national level without segregating for social and economic groups of a population, mainly due to data limitation. The estimation of life expectancy at birth among social and economic groups is useful to assess the impact of various program and policies designed to improve the well being of the population sub-groups. This policy brief provides the estimated life expectancy at birth among poor and non-poor by caste and religion in India. This brief is derived from a chapter of an IIPS project entitled "Inequality in Human Development by Social and Economic Group in India".

Methodology

The Brass Method that required data on mean children ever born and mean children surviving by five year age group of women was used to derive the life expectancy at birth using the UN MORTPACK. Data on mean children ever born and mean children surviving of various social and economic groups are derived from the three rounds of National and Family Health Surveys (NFHS) and used in the estimation of life expectancy at birth. The analyses has been carried out for four caste groups, namely, Scheduled Caste (SC), Scheduled Tribe (ST), Other Backward Class (OBC) and Others and three religious groups - Hindus, Muslims and Christians. The economic well being of the household is assessed using wealth quintiles and poverty level of the household. Under the assumptions that those who are poor by consumption are also poor by wealth, the cut-off point of poor (from wealth index) was equated to the estimates of

Graph 1: Trends in life expectancy at Birth by wealth quintiles in India, 1992-2006



poverty by Planning Commission, Govt. of India for the period close to the survey year. The estimates of life expectancy at birth are derived among poor and non-poor by caste and religious groups.

Results

A. Estimated life expectancy at birth by economic groups

The life expectancy at birth estimated from the Brass Method are comparable to the estimates derived from the Sample Registration System (SRS). The estimated life expectancy at birth in India was 61.8 years in 1992-93 compared to 60.3 years of SRS in 1993, 63.8 years in 1998-99 compared to 61.9 years of SRS in 1998 and 65.5 years in 2005-06 compared to 63.5 years of SRS in 2004. The estimated life expectancy at birth varies directly with the wealth status of the household cutting across the period. In 2005-06, the life expectancy at birth among the poorest wealth quintile was 62 years compared to 73 years among the richest wealth

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quintile (Fig 1). The increase in longevity is observed cutting across the wealth groups. During 1992-2006, the difference in longevity among the poorest and the richest wealth quintile remained large (at 11 years) though the average annual increase in life expectancy at birth had increased equally (0.3 years) among the poorest and the richest wealth quintile.

B. Estimated life expectancy at birth among caste groups and poverty level

For understanding the change in life expectancy among caste groups over the years, the data of last two rounds of NFHS were used (data on OBC was not collected in NFHS 1). In 2005-06, the estimated life expectancy at birth was 60 years among ST, 65 years among SC, 66 years among OBC and 68 years among others (Table-1). Though the differences in life expectancy at birth across the caste group persists, it is not so by the household poverty. The life expectancy at birth among poor were similar cutting across the caste groups (63 years each among poor belonging to SC, OBC and others) except that of ST (57 years).

On the other hand, the differences in longevity among poor and non-poor were highest among ST (7 years) and minimum among SC (3 years). The average gain in life expectancy at birth in last 7 years was 0.5 years among poor belonging to SC compared to 0.6 among poor belonging to OBC and 0.1 among

Table 1: Life expectancy at birth (in years) among caste groups by poverty level in India, 1998-2006

Caste Groups	Life expectancy at birth in years in		Average annual Change in life expectancy at birth during 1998-2005
	1998-99	2005-06	
Schedule Caste			
Poor	59.8	63.0	0.5
Non-poor	62.9	66.0	0.4
Total	61.5	64.6	0.4
Schedule Tribe			
Poor	57.5	56.9	-0.1
Non-poor	61.5	64.1	0.4
Total	59.6	60.3	0.1
Other Backward Class			
Poor	58.7	62.7	0.6
Non-poor	65.5	67.2	0.2
Total	63.5	65.7	0.3
Others			
Poor	61.9	62.7	0.1
Non-poor	68.0	69.3	0.2
Total	66.7	67.8	0.2
All	63.8	65.5	0.2

Table 2: Trends in life expectancy at birth in years by poverty level and religion in India, 1992-2006

	Life expectancy at birth in 1992-93	Life expectancy at birth in 2005-06	Average annual change in life expectancy in 1992-2006
Hindu			
Poor	57.6	61.5	0.3
Non Poor	63.5	67.8	0.3
Total	61.1	65.2	0.3
Muslims			
Poor	60.9	65.5	0.3
Non Poor	66.2	68.4	0.2
Total	63.9	67.7	0.3
Christians			
Poor	60.8	64.4	0.3
Non Poor	71.8	72.0	0.0
Total	67.5	69.3	0.1
All	61.8	65.5	0.3
SRS*	60.3	63.5	0.3

*SRS estimates of 60.3 and 63.5 refers to the year 1993 and 2004 respectively

Others. The gain in longevity was maximum among SC followed by OBC, Others and ST.

C. Estimated life expectancy at birth among religious groups and poverty level

During 1992-2006, the estimated life expectancy at birth has increased from 61 years to 65 years among Hindus, from 64 years to 68 years among Muslims and from 68 years to 69 years among Christians (Table-2). Differentials in estimated life expectancy at birth by poverty level showed the persistent gap in longevity among poor and non-poor in all three religious groups. A comparison of longevity among poor revealed that the longevity among poor belonging to Hindus and Christians are similar while it is marginally higher among poor belonging to Muslims. The average annual change in life expectancy among the poor belonging to Hindus and Muslims was 0.3 years while it was 0.1 years among poor belonging to Christians. It may be noted that the gain in longevity beyond 70 years is very slow, as revealed among Christians.

Conclusion

From the results, we conclude that i) the gap in longevity by economic groups remained large over the years; ii) the life expectancy at birth are similar among the poor cutting across the caste groups; and iii) the life expectancy at birth in last 14 years has increased among all castes and religious groups.

For further details about this study, please contact Dr S.K.Mohanty at sanjay@iips.net

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