### Original Research Article

## Disability profiling of India and Maharashtra in census 2011 with decadal variation

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#### **Abstract**

Background: As per Census 2011, in India, out of the 121 Cr population, about 2.68 Cr persons are 'disabled' which is 2.21% of the total population. In an era where 'inclusive development' is being emphasised as the right path towards sustainable development, focussed initiatives for the welfare of disabled persons are essential. This emphasises the need for strengthening disability statistics in the Country Aims and Objectives: To study Disability profiling of India and Maharashtra in Census 2011 with decadal variation. Methodology: This was a Census based study carried out in the one month period i.e. May 2018 at tertiary health care centre i.e. in Census 2011 and 2001 with respect to the disabled population all the disabled population with respect to age, sex, urban, rural, type of disability etc. was noted, the data was collected from the data available on the Census of 2011 and 2001 of respective years website. Result: In overall India, majority (69%) of the disabled population resided in rural areas (1.86 Cr disabled persons in rural areas and 0.81 Cr in urban areas). In the case of total population also, 69% are from rural areas while the remaining 31% resided in urban areas. The majority of the disabled populations were in the age group of 10-19 Yrs. As per the census 2011; the percentage of disabled to the total population increased from 2.13% in 2001 to 2.21% in 2011. In rural areas, the increase was from 2.21% in 2001 to 2.24% in 2011 whereas, in urban areas, it increased from 1.93% to 2.17% during this period. The same trend was observed among males and females during this period. The percentage decadal change in disabled population during 2001 -2011 is 22.4, whereas for the total population, the percentage decadal change is 17.7. The most common type of disability was in movement i.e. 20% followed by in hearing 19%. The majority of the disabled population from Maharashtra were in the age group of 20-29 Yrs. i.e. 492115 followed by 10-19 were 484883 As per the 2001 census, the most common disability was Visual i.e. 5.81 lakhs followed by Locomotor were 5.7 lakhs Conclusion: The prevalence of disability is increasing in all India and also in Maharashtra also as per the decadal period in the two subsequent censuses if this trend will continue in the future there will tremendous number of persons with disability so country has to bear the burden of it not only economical but also health, lack employment and also the basic needs of

**Key Words:** Census 2011, Census 2001, Disabled population.

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#### **INTRODUCTION**

As per Census 2011, in India, out of the 121 Cr population, about 2.68 Cr persons are 'disabled' which is 2.21% of the total population. In an era where 'inclusive development' is being emphasised as the right path

towards sustainable development, focussed initiatives for the welfare of disabled persons are essential. This emphasises the need for strengthening disability statistics in the Country<sup>1</sup>. According to a UN forecast, by 2050 there will be 323 million people over age 60 in India<sup>2</sup>. As aging is closely associated with increasing disability prevalence, India will face important structural and financial challenges related to the huge absolute numbers of people with disabilities requiring adequate social and health care. Expected increases in the number of people with disabilities also pose challenges for sustainable development, because disability in developing countries like India is closely related to the lack of education, extreme poverty, and social exclusion<sup>3-5</sup>. All of these important issues require the careful monitoring and planning of financial resources, which is impossible without more comprehensive data on disability and its determinants. International evidence on the prevalence of disability in developing countries is scarce, and often generates contradictory figures. Disability is usually defined as a physical or a mental health condition that limits a person's ability to perform normal life activities. However, the prevalence figures largely depend on data sources and methodological approaches (definitions). The existing rough estimations from international agencies such as the UN or the World Bank suggest that 10-12% of the global population have at least one disability<sup>6</sup>. However, the WHO World Health Survey and the WHO Global Burden of Disease study provide higher figures (16–19%)<sup>6</sup>. According to the WHO World Health Survey estimation for 2002-2004, disability prevalence in India is much higher (25%) than the global average. Although the percentage of people with disabilities is lower in India than in neighboring Bangladesh (32%), it is almost twice as high as in Pakistan and Sri Lanka. It has been acknowledged that the WHO WHS and other surveybased estimates suffer from important deficiencies related to coverage, representativeness, exclusion of most vulnerable groups, and reporting biases; and that these seriously deficiencies may distort international comparisons. For many developing countries, the only reliable data source for disability prevalence remains population censuses. Although they provide only very broad, self-reported data, the census-based disability estimates may be based on higher levels of coverage and representativeness than surveys. The census-based figures on disability are usually lower than those based on specific survey data<sup>6</sup>, primarily because most health surveys ask a larger number of questions and more detailed questions than the census. For example, the 2001 census estimate for India, which is based on a narrower (medical) definition of disability, indicates that the total population with any kind of disability is 11.8 million, whereas the corresponding National Sample Survey (NSS) estimate is 26.5 million. Despite the large discrepancy between these two figures, certain sociodemographic patterns of disability in India emerge when we examine the data from these diverse sources. For instance, previous findings clearly indicate that the prevalence of disability in India steeply increases with age<sup>8</sup>. Locomotor disability has been shown to be the most prevalent type of disability in India<sup>8</sup>. Rates of locomotor and hearing disabilities have been found to be much higher among Indian men than Indian women, while rates of seeing disabilities have been found to be higher among women than men<sup>8–9</sup>. Although having a disability is often associated with severe socioeconomic disadvantages and poverty, only a small fraction of the people with disabilities in India receive government assistance<sup>5,10–13</sup>. The country's disabled population has increased by 22.4% between 2001 and 2011. The number of disabled, which was 2.19 crore in 2001, rose in 2011 to 2.68 crore—1.5 crore males and 1.18 crore females. Rural areas have more disabled people than urban areas. In Maharashtra, Andhra Pradesh, Odisha, Jammu and Kashmir and Sikkim, the disabled account for 2.5% of the total population, while Tamil Nadu and Assam are among those where the disabled population is less than 1.75% of the total population, says the 2011 Census on the disabled released on Saturday<sup>14</sup>.

#### MATERIAL AND METHODS

This was a Census based study carried out in the one month period i.e. May 2018 at tertiary health care centre i.e. in Census 2011 and 2001 with respect to the disabled population all the disabled population with respect to age, sex, urban, rural, type of disability etc. was noted, the data was collected from the data available on the Census of 2011 and 2001 of respective years website.

#### RESULT

**Table 1:** Total population and Disabled persons of India (census 2011)

Population, India 2011		Disabled persons, India 2011			
Persons	Males	Females	Persons	Males	Females
121.08 Cr	62.32 Cr	58.76Cr	2.68 Cr	1.5 Cr	1.18 Cr

In India out of the 121 Cr population, 2.68 Cr persons are 'disabled' which is 2.21% of the total population. Among the disabled population 56% (1.5 Cr) are males and 44% (1.18 Cr) are females. In the total population, the male and female population are 51% and 49% respectively. Majority (69%) of the disabled population resided in rural areas (1.86 Cr disabled persons in rural areas and 0.81 Cr in urban areas). In the case of total population also, 69% are from rural areas while the remaining 31% resided in urban areas.

**Table 2:** Age and sex wise distribution of the disabled population

Age group	Persons	Male	Female
Total	268,10,557	149,86,202	118,24,355
0-4	12,91,332	6,90,351	6,00,981
5-9	19,55,539	10,81,598	8,73,941
10-19	46,16,050	26,10,174	20,05,876
20-29	41,89,839	24,18,974	17,70,865
30-39	36,35,722	21,12,791	15,22,931
40-49	31,15,651	18,51,640	12,64,011
50-59	24,92,429	14,30,762	10,61,667
60-69	26,57,679	13,94,306	12,63,373
70-79	17,69,370	8,84,872	8,84,498
80-89	7,23,585	3,37,170	3,86,415
90+	2,25,571	97,409	1,28,162
Age Not Stated	1,37,790	76,155	61,635

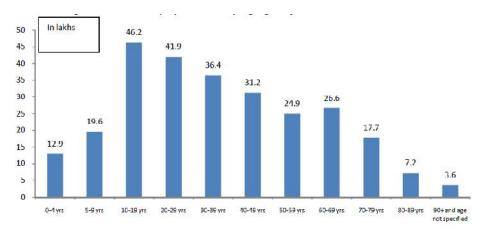


Figure 1: Disabled population by age group in India- Census, 2011

From Table 2 and Graph 1: The majority of the disabled populations were in the age group of 10-19 Yrs. were 46.2 lakhs. Followed by 20-29 Yrs. were 41.9 lakhs. 30-39 Yrs. were 36.4.

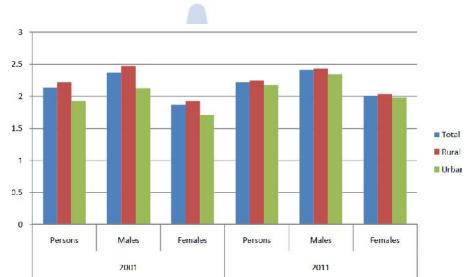


Figure 2: Percentage of disabled to the concerned total population in India - Census 2001 and 2011

The percentage of disabled to the total population increased from 2.13% in 2001 to 2.21% in 2011. In rural areas, the increase was from 2.21% in 2001 to 2.24% in 2011 whereas, in urban areas, it increased from 1.93% to 2.17% during this period. The same trend was observed among males and females during this period.

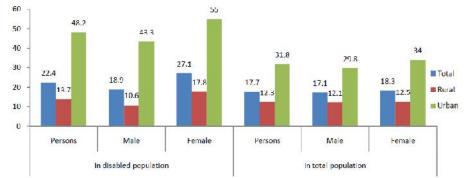


Figure 3: Percentage Decadal change in disabled population and total population, India 2001-2011

The percentage decadal change in disabled population during 2001 -2011 is 22.4, whereas for the total population, the percentage decadal change is 17.7.

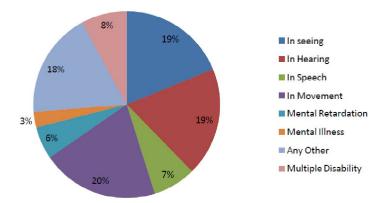


Figure 4: Various types of disabilities

The most common type of disability was in movement i.e. 20% followed by in hearing 19%, in seeing 19%, Any other 18%, multiple disability was 8%, in speech was 7%, Mental retardation was 6%, mental illness

**Table 3:** Age and sex wise population of Maharashtra in 2011 census

Area Name	Total number of disabled persons		
MAHARASHTRA	Persons	Males	Females
Age-group			
0-4	141926	76954	64972
5-9	199445	110981	88464

10-19	484883	275083	209800
20-29	492115	283598	208517
30-39	447379	262291	185088
40-49	378502	228610	149892
50-59	285267	171870	113397
60-69	268581	145211	123370
70-79	168107	89186	78921
80-89	58140	28650	29490
90+	18928	8421	10507
Age Not Stated	20119	11430	8689
Total	2963392	1692285	1271107

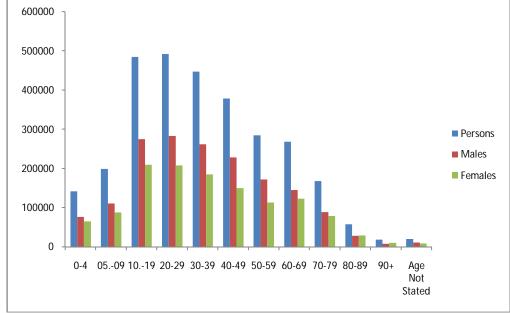


Figure 5: Age and sex wise population of Maharashtra in 2011 census

From above Table 3 and Graph 5 it is clear that the majority of the disabled population from Maharashtra were in the age group of 20-29 Yrs. i.e. 492115 followed

by 10-19 were 484883 And the majority of the patients were males as compared to females in all the age groups.

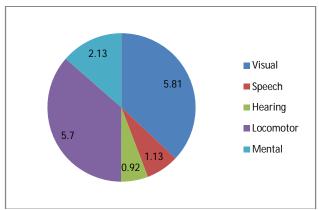


Figure 6: Disabled population of Maharashtra as per 2001 census (population in lakhs)

The most common disability was Visual i.e. 5.81 lakhs followed by Locomotor were 5.7 lakhs, Mental were 2.13 lakhs, Speech were 1.13 lakhs, in hearing were 0.92 lakhs.

#### **DISCUSSION**

covering Disability itself is a huge term, multidimensional impairments, activity limitations and participation restrictions. Impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Thus disability is a complex phenomenon, reflecting an interaction between features of a person's body and features of the society in which he or she lives. "Disabled people are not only the most deprived human beings in the developing world, they also the most neglected"<sup>24</sup>. Roughly 10 percent of the population in the world or 650 million people live with disability<sup>17</sup>. There is a marked asymmetry in burden of disability shared by developed and developing countries with the latter accounting for almost 80 percent of the total disabled population. Asia alone constitutes at least 400 million people with disabilities. Not only people with disabilities but also their families and communities are affected by disability<sup>17</sup> NSS (National Sample Survey) of 36th, 47th and 58th round has provided data on disabled population. The 36th round (1981) of NSS data has introduced the demographic status of the disabled population. The 36th round, the NSS data covered only three types of disabilities. It included visual, communication (i.e. hearing and/or speech) and locomotors, whereas in 47th round of NSS the mental disability has been included as one of the type along with the previous three. In the 47th NSSO survey, the objective was to provide the incidence and prevalence of disability in the country. In India, the official figures provided by Census 2011 (26.8 million)

and 2002 (18.5 million) indicate that around 2 percent of country's population suffers from disability 16-23. These figures account for 3.2 percent of the total disabled in the world. According to 2001 census 21 million people were disabled which has increased to 26 million in 2011 census<sup>15-16</sup>. The number of people with disabilities is expected to increase. The reasons are complex and multifaceted and largely due to health, demographic, and development factors. A study examined the differences in employment and wages between males with and without disabilities in rural Tamil Nadu, the authors concluded that "employment gap between individuals with and without disability is not explained by differences in human capital and productivity, and may result from differential returns to characteristics and from discrimination in access to employment" <sup>19,21</sup>. In India out of the 121 Cr population, 2.68 Cr persons are 'disabled' which is 2.21% of the total population. Among the disabled population 56% (1.5 Cr) are males and 44% (1.18 Cr) are females. In the total population, the male and female population are 51% and 49% respectively. Majority (69%) of the disabled population resided in rural areas (1.86 Cr disabled persons in rural areas and 0.81 Cr in urban areas). In the case of total population also, 69% are from rural areas while the remaining 31% resided in urban areas. The majority of the disabled populations were in the age group of 10-19 Yrs. were 46.2 lakhs. Followed by 20-29 Yrs, were 41.9 lakhs, 30-39 Yrs, were 36.4. As per the census 2011; the percentage of disabled to the total population increased from 2.13% in 2001 to 2.21% in 2011. In rural areas, the increase was from 2.21% in 2001 to 2.24% in 2011 whereas, in urban areas, it increased from 1.93% to 2.17% during this period. The same trend was observed among males and females during this period. The percentage decadal change in disabled population during 2001 -2011 is 22.4, whereas for the total population, the percentage decadal change is 17.7. The most common type of disability was in movement i.e. 20% followed by in hearing 19%, in seeing 19%, Any other 18%, multiple disability was 8%, in speech was 7%, Mental retardation was 6%, mental illness the majority of the disabled population from Maharashtra were in the age group of 20-29 Yrs. i.e. 492115 followed by 10-19 were 484883. And the majority of the patients were males as compared to females in all the age groups. As per the 2001 census, the most common disability was Visual i.e. 5.81 lakhs followed by Locomotor were 5.7 lakhs, Mental were 2.13 lakhs, Speech were 1.13 lakhs, in hearing were 0.92 lakhs. From this it is clear that the prevalence of disability is increasing in all India and also in Maharashtra also as per the decadal period in the two subsequent censuses if this trend will continue in the future there will

tremendous number of persons with disability so country has to bear the burden of it not only economical but also health, lack employment and also the basic needs of them so the programs should be launched nationwide to prevent, decrease, and rehabilitate the disabled persons.

#### **CONCLUSION**

The prevalence of disability is increasing in all India and also in Maharashtra also as per the decadal period in the two subsequent censuses if this trend will continue in the future there will tremendous number of persons with disability so country has to bear the burden of it not only economical but also health, lack employment and also the basic needs of them

#### REFERENCES

- 1. Disabled persons in India 2016. Available at :http://www.disabilityaffairs.gov.in accessed on June 2018.
- United Nations Population Division (UN), World Population Prospects: The 2010 Revision (New York: United Nations, 2011), accessed at http://esa.un.org/unpd/wpp/index.htm, on May. 7, 2016.
- Elwan A (1999). Poverty and disability SP discussion paper No 9932. Available at http://www.wds.worldbank.orgservlet/WDSContentSer ver/IW3P/IB/2000/12/15/000094946\_0011210532099/Re ndered/PDF/multi\_page.pdf. Accessed on 23rd December 2014.
- Mishra AK, Gupta R (2006). Disability index: a measure of deprivation among the disabled. Economic and Political Weekly 41:4026–4029.
- Filmer D (2008). Disability, Poverty, and Schooling in Developing Countries: Results from 14 Household Surveys. The World Bank Economic Review 22(1): 141– 163.
- 6. Mont D (2007). Measuring disability prevalence. World Bank Social Protection Discussion Paper, 706.
- Jeffery R, Singal N (2008). Measuring Disability in India. Economic and Political Weekly 43(12/13): 22–24.
- 8. Patel S (2009). An Empirical Study of Causes of Disability in India. Internet Journal of Epidemiology6
- Das D, Agnihotri SB (1999). Physical disability: Is there a Gender Dimension? Economic and political weekly 33(52): 3333–3335.
- Kandamuthan M, Kandamuthan S (2004). The Economic Burden of Disabled Children on Families in Kerala in South India. Centre for Development Studies Discussion

- Paper No. 91. Available at http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=99 5114. Accessed on 24th December 2014.
- 11. Singh A (2008). Burden of Disability in a Chandigarh Village. Indian J Community Med 33(2): 113–115. doi: 10.4103/0970-0218.40880 [PMC free article] [PubMed]
- 12. Harriss WB (1999). On to a loser: Disability in India Illfare in India: essays on India's social sector in honour of S Guhan. Sage Publications; New Delhi, India: pp 135–163.
- Hoogeveen JG (2005). Measuring welfare for small but vulnerable groups: Poverty and disability in Uganda. Journal of African Economies 14(4): 603–631.
- 14. Disabled population up by 22.4% in 2001-11 available at : https://timesofindia.indiatimes.com/india/Disabled-population-up-by-22-4-in-2001-
  - 11/articleshow/28072371.cms accessed on June 2018.
- Census of India. 2001. The First Report on Disability. Registrar General and Census Commissioner, New Delhi, India.
- Census of India. 2011. The First Report on Disability. Registrar General and Census Commissioner, New Delhi, India.
- 17. Edmonds\*, L. J. (2005). Mainstreaming community based rehabilitation in primary health care in Bosnia-Herzegovina. Disability and Society, 20(3), 293–309. http://dx.doi.org/10.1080/09687590500060711
- Elwan, Ann. 1999. Poverty and Disability: A Survey of Literature. Social Protection Discussion Paper Series, World Bank.
- 19. Ghai, Anita. 2002. Disabled Women: An Excluded Agenda of Indian Feminism. Hypatia, Vol. 17 (3): 49–66. http://dx.doi.org/10.1111/j.1527-2001.2002.tb00941.x
- Harriss, WB. 1999. On to a Loser: Disability in India. In Essays on India's Social Sector in Honour of S. Guhan, eds. B. Harriss-White and S. Subramanian, 135–163. Sage Publications, New Delhi.
- Mitra, S. and Sambamoorthi, U. 2008. Disability and the Rural Labour Market in India: Evidence for Males in Tamil Nadu. World Development, Vol. 36 (5), 934–952. http://dx.doi.org/10.1016/j.worlddev.2007.04.022
- Mishra, A K and Gupta, R. 2006. Disability Index: A Measure of Deprivation among Disabled. Economic and Political Weekly, Vol. 41 (38):4026–4029.
- National Sample Survey Organization, 2002. Report No 485: Disabled Persons in India 58th Round. Ministry of Statistics and Programme Implementation, Government of India
- World Health Organization. 2002. "World Report of Disability". Geneva, Switzerland: Department of Gender and Women's Health, WHO

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