

BACKGROUND

According to the report published by WHO in 2011, around one billion people were Disabled in the world (WHO Report on Disability,2011). 10% of the people experience some form of impairment or disability in their lifetime (WHO action plan 2006-11). There is a huge variation of prevalence among the countries belonging to Developed and Developing nations. According to the *World Health Survey*, around 785 million persons aged 15 years and more live with a disability. On the other hand, the *Global Burden of Disease* estimates a figure of around 975 million (19.4%) persons, which is higher than the estimates of WHO (World Report on Disability).

In the Southeast region of the world, there is variation in the prevalence of disability from 1.5% to 21% based on the definition consider for the measurement of disability, and it's Severity (Mont 2007).

India consists of about 26.8 million of the disabled population (Census 2011), which was around 1.8%, i.e., 18.5 million in the 58th round of NSS(National Sample Survey 2002). Research has shown that the actual prevalence is expected to be more than the percentage calculated. According to the world bank report in 2016, there is growing evidence that people with disabilities compromise 55-90 million in total population in India (World Bank report, 2016). The difference in them can be attributed to the definition of disability and the way it's measured. There is a significant increase in the percentage of disabled people in the last decade. The increment in the prevalence of the disability is due to the increase in the proportion of the aged population. Other than this, the reason for the increment of the disability varies and kind of complex to explain. They basically include factors related to health, demography, and development. The environment is also playing a vital role in the occurrence of disability.

DATA SOURCE

The Survey of Persons with Disabilities in India was conducted during NSS 76th round (July - December 2018). In this survey, the total number of persons with disabilities surveyed was 1,06,894 (74,946 in rural areas and 31,948 in urban areas). Provision was made in Schedule 26 to classify the persons with disabilities as per the classification used in the *Rights of Persons with Disabilities Act (PWD Act) 2016*. For persons with disabilities, data were collected on the difficulty faced in accessing/ using public transport and accessing/using the public building. Information on out of pocket expenditure, living arrangement, employment status, whether receiving/received vocational/ technical training and source of funding, etc. have been collected.

Outcome variable-

- Particular about education enrollment for persons aged 3-35 years: Ever enrolled in Ordinary School, Currently attending ordinary School, Not Attending due to Disability, Ever Enrolled in Special School, Currently attending special School.

- Reasons for not enrolling in a special school for persons aged 3-35 years: Due to Disability, No Accessibility, Not Interested in Education, Completed Desired Level/ Class, Economic Reasons, Other Reasons
- Work Status of people having at least one disability in the age group 15-59: Self-employed, Wage/Salaried employer, Casual worker, sought/didn't seek but available for work, Neither working nor available for work.
- Effect of various factors on the working status of the disabled person aged 15-59 years.
Work Status: whether loss of work due to a disability, still working (changed the job or in the same job).

METHOD USED

All the statistical analysis has been performed using STATA version 14. The bivariate and multivariate analyses have been done for different factors.

Propensity Score Matching Analysis: Propensity Score Matching is an innovative class of statistical methods that are useful in evaluating the treatment effects for cross-sectional/observational/non-experimental data when randomized clinical trials are not available.

It is probable that a disabled person of the working-age population has no difficulty using public transport or building, given their various types of disabilities and percentage of disability on their certificate age, gender, sector, social groups, and living arrangement.

$$p(X) = Pr(D = 1|X)$$

Where $D = \{0,1\}$ is the indicator of exposure to a certain treatment, and X is the multidimensional vector of pre-treatment characteristics.

For the calculation of average treatment (effect of aid, technical/vocational training, and ease of usage/ accessing the public building and transport on the working status of a disabled person aged 15-59) effect, a counterfactual model has been constructed. Counterfactual is the potential outcome or the state of affairs that would have happened in the absence of the cause. With the help of the counterfactual model, the Average Treatment Effect on the Treated (ATT) has been calculated. This measures the impact of the treatment on the treated group

$$ATT = E(Y_1|D=1) - E(Y_0|D=1)$$

Where $E(Y_1|D=1)$ is the average outcome of the treated group.

The Average Treatment Effect on the Untreated (ATU) group was measured, which shows the impact that the treatment would have had on those who were not exposed

$$ATU = E(Y_1|D=0) - E(Y_0|D=0)$$

Where $E(Y_0|D=0)$ is the average observed outcome for the untreated group. *ATE* is the average treatment effect

EXPECTED OUTCOME

we have calculated the education enrollment status of the people aged 3-35 years, whether they are attending any educational institute or special school. Even if they are enrolled, what is the attendance status? We have also tried to know what are the main reasons for non-enrollment in the special school. We have also tried to know the type of occupation a person having a certain disability is engaged in.

It will also help us see if there is an association between factors such as any aid, or training, or ease of accessing public transport and buildings and the person's work status with any disability. We want to know what will be a disabled person working status in working-aged 15-59 if he/ she is provided above facilities.