

Measuring Disability in a Census

Select Topics in International Censuses¹

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INTRODUCTION

The United Nations Sustainable Development Goals (SDGs) include disability in the goals on education, employment, social, economic, and political inclusion, and safe and accessible cities. Furthermore, the SDGs call for building the capacity of national statistical organizations in developing countries to increase the availability of quality data disaggregated by disability.

Prevalence of disability varies widely across the globe with low-income countries generally reporting lower rates of disability (1 to 3 percent) than high-income countries (8 to 20 percent) (Mont, 2007; WHO, 2011; Hirshberg and Mont, ND). Possible reasons for the range in disability rates include the use of different definitions of disability, number and type of questions asked, method of data collection, and the quality of the study design (WHO, 2011; Mont, 2007). While surveys tend to report higher rates of disability than censuses (Mont, 2007), for countries that do not have regular surveys to assess the prevalence and distribution of disability, a census can be an important source of information on disability. Such information on disability can be used to:

- Guide the development of disability-related policies, programs, and services.
- Monitor levels and trends.
- Evaluate human and civil rights efforts to equalize opportunities.

CONCEPTS AND DEFINITIONS

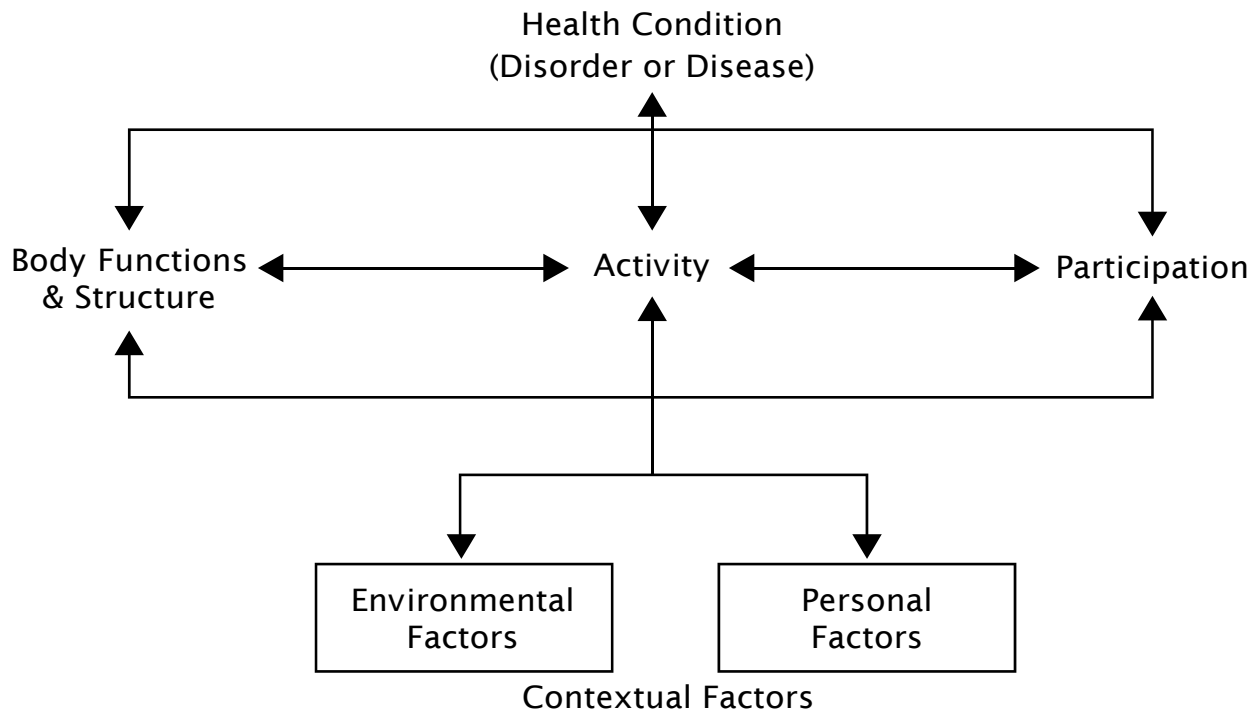
Disability is challenging to measure because multiple concepts and definitions of disability exist. The medical model of disability views disability as a characteristic of the person, directly caused by disease, trauma, or other health condition. The response to disability under the medical model requires individual medical care by health professionals. The social model of disability, on the other hand, views disability as a socially created problem. The required response is political: to improve unaccommodating physical environment originating from attitudes and other features of the social environment. While both models are valid, neither model addresses the complexity of disability on its own (WHO, 2002).

The World Health Organization's (WHO) International Classification of Functioning, Disability, and Health (ICF) has embraced the biopsychosocial model, where disability is seen as outcomes of interactions between a person's health conditions (diseases, disorders, and injuries) and their physical, cultural, and policy contexts (WHO, 2002). The ICF framework places emphasis on function rather than condition or disease. The ICF identifies three levels of functioning: (1) body or body part, (2) the whole person, and (3) the whole person in a social context. Dysfunctions in one or more of these levels lead to impairments, activity limitations, and/or participation restrictions that result in disability (see Figure 1).

Under the ICF model of disability, asking, "Do you have a disability?" does not sufficiently identify disability. Further, this type of question has led to different interpretations across cultures and made it difficult to compare the levels of disability across countries.

¹ This technical note is one in a series of "Select Topics in International Censuses" exploring matters of interest to the international statistical community. The U.S. Census Bureau helps countries improve their national statistical systems by engaging in capacity building to enhance statistical competencies in sustainable ways.

Figure 1.
The International Classification of Functioning, Disability, and Health Conceptual Model of Disability



Source: WHO, 2002.

In accordance with the ICF, the United Nations Principles and Recommendations for Population and Housing Censuses, Revision 3 (United Nations Statistics Division, 2015) defines persons with disabilities as those “who are at greater risk than the general population for experiencing restrictions in performing specific tasks or participating in role activities. This group would include persons who experience limitations in basic activity functioning, such as walking or hearing, even if such limitations were ameliorated by the use of assistive devices, a supportive environment or plentiful resources” (United Nations, 2016).

CENSUS QUESTIONS

The United Nations recommends using questions on disability developed by the Washington Group on Disability Statistics (WG) for use in national censuses. These questions are relevant for the population 5 years and older and are shown in Box 1. The questions reflect six domains for measuring disability: seeing, hearing, walking, cognition, self-care, and communication. Of the six domains, the United Nations considers the first four basic domains (seeing, hearing, walking, and cognition) to be essential.

The use of assistive devices like glasses and hearing aids can almost completely overcome limitations in seeing and hearing for a large portion of those with impaired

functioning in those domains. Therefore, the WG questions ask about difficulty seeing or hearing even with the use of glasses or hearing aids. Asking about difficulty seeing or hearing without the use of glasses or hearing aids would make it difficult to distinguish people who have little risk of participation problems from those at great risk.

Because people have differing understanding of disability, the exact wording of the disability questions is very important in identifying people with disabilities. Enumerators should be trained to use the exact wording of the disability questions. Further, the disability questions should be asked of every member of the household. Broad screening questions about the presence of persons with disabilities in the household should be avoided.

Key Point

Asking broad screening questions such as, “Is there anyone in the household who has a disability?” or “Does he/she have a disability?” results in inaccurate estimates of disability and should be avoided.

Box 1.

Census Questions on Disability Endorsed by the Washington Group for the Population 5 Years and Above

Introductory phrase: The next questions ask about difficulties you may have doing certain activities because of a HEALTH PROBLEM.

1. Do you have difficulty seeing, even if wearing glasses?

- a. No – no difficulty
- b. Yes – some difficulty
- c. Yes – a lot of difficulty
- d. Cannot do at all

2. Do you have difficulty hearing, even if using a hearing aid?

- a. No – no difficulty
- b. Yes – some difficulty
- c. Yes – a lot of difficulty
- d. Cannot do at all

3. Do you have difficulty walking or climbing steps?

- a. No – no difficulty
- b. Yes – some difficulty
- c. Yes – a lot of difficulty
- d. Cannot do at all

4. Do you have difficulty remembering or concentrating?

- a. No – no difficulty
- b. Yes – some difficulty
- c. Yes – a lot of difficulty
- d. Cannot do at all

5. Do you have difficulty (with self-care such as) washing all over or dressing?

- a. No – no difficulty
- b. Yes – some difficulty
- c. Yes – a lot of difficulty
- d. Cannot do at all

6. Using your usual (customary) language, do you have difficulty communicating, for example understanding or being understood?

- a. No – no difficulty
- b. Yes – some difficulty
- c. Yes – a lot of difficulty
- d. Cannot do at all

Source: Washington Group on Disability Statistics.

ANALYSIS GUIDELINES

Disability status is determined by whether the respondent answered “Yes – a lot of difficulty” or “Cannot do at all” for any of the questions.

To monitor levels and trends, guide the development of policies, programs, and services, and assess equalization of opportunities, the United Nations recommends tabulating the prevalence of disability in a population by the following indicators:

- Sex
- Age
- Place of residence
- Type of household
- Marital status
- Educational attainment and school attendance
- Labor force status
- Status of employment
- Industry
- Occupation

Knowing the prevalence and distribution of disability in a population is important for setting national policies and programs. However, measuring disability can be challenging. This note summarizes the recommendations from the international community on measuring disability in a census.

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