Alternative Definitions of Disability: Implications of Increasing Inclusiveness

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Introduction

Disability is a complex concept, and accurately measuring its prevalence in national-level surveys presents many challenges. Different definitions of disability, and the way these definitions are operationalized through question wording and placement, influence the levels of disability estimated and the characteristics of the disabled population. This paper presents estimates of the U.S. adult population identified as disabled as the definition of activity limitation becomes more inclusive. We identify the basic demographic and socioeconomic characteristics of the disabled population according to different criteria of disability and analyze the health conditions underlying disability. Particular attention is paid to the differences between the characteristics of the elderly and the non-elderly disabled population. The public health and public policy implications of differing disabled populations are also discussed.

Data

Data are derived from the National Health Interview Survey (NHIS), a nationally representative sample of the noninstitutionalized population conducted annually by the National Center for Health Statistics. Beginning in 1997, the NHIS included questions for all adult respondents on different aspects of disability ranging from needing help with personal care activities such as bathing and eating (ADL limitations) to being "limited in any way" because of a chronic physical, mental or emotional problem. Data from survey years 1999 to 2001 are combined to achieve sufficient sample size. In preliminary analyses, a hierarchy of activity limitation was created using 3 sets of questions: ADL limited (answering ves to the question: "Because of a physical, mental, or emotional problem, do you need the help of other persons with PERSONAL CARE NEEDS, such as eating, bathing, dressing, or getting around inside this home?); ADL or IADL limited (answering yes to the above personal care needs question or to the question: "Because of a physical, mental or emotional problem, do you need the help of other persons in handling ROUTINE NEEDS, such as everyday household chores, doing necessary business, shopping, or getting around for other purposes?"); and any limitation (answering yes to either of the above 2 questions or to the question: "Are you LIMITED IN ANY WAY in any activities because of physical, mental, or emotional problems?"). In later analyses, we will experiment with adding questions on work limitation and on limitation due to memory impairment to this hierarchy.

Preliminary Results

One-third of the elderly population reported any kind of activity limitation, compared with 16% of the population 45-64 and 6% of the population 18-44. The most severe (ADL)

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limitation ranged from 6 % of the total 65+ population to less than 1 % of persons 18-44. The proportion of the disabled population aged 45-64 and 65+ who were African American or Hispanic was higher among those who report ADL or IADL limitations compared with the group reporting any limitation in activity. Socioeconomic differences among the population by levels of disability were more noticeable for younger ages (18-44 and 45-64), than for the elderly. The ADL and IADL limited groups for these ages had a higher proportion of persons with low income and less than a high school education compared with persons who report any limitation.

The table below shows the top 10 conditions causing limitations among persons who reported any activity limitation. Respondents could name up to 5 conditions. Mental illness and back and neck pain are more commonly reported among younger persons compared with the elderly. Diabetes is often mentioned as a cause of disability starting in middle age. Arthritis is most often mentioned among the elderly for all levels of disability, while heart conditions and stroke (along with arthritis) are the attributed causes of severe limitation (ADL limitations) among persons 65+. For future analyses, we will refine the condition categories and analyze them by sex and race/ethnicity.

Top 10 Reported Conditions among Disabled Persons by Type of Limitation: U.S., 1999-2001

Aged 18-44

ADL

ADL or IADL

Any Limitation

 Mental Retardation Back/neck pain 	Back/neck pain Depression/anxiety/emotional	Back/neck pain Depression/anxiety/emotional
3. Nervous system	Mental retardation	Fracture/bone/joint injury
4. Depression/anxiety/emotional	Nervous system	Nervous system
5. Arthritis	Arthritis	Lung/breathing problem
6. Other developmental	Vision	Arthritis
7. Vision	Fracture/bone/joint injury	Other injury
8. Fracture/bone/joint injury	Other developmental	Mental retardation
9. Other injury	Other injury	Musculoskeletal
10. Other	Heart	Vision

Aged 45-64

ADL

ADL or IADL

Any Limitation

1. Arthritis	Arthritis	Back/neck pain
2. Back/neck pain	Back/neck pain	Arthritis
3. Diabetes	Depression/Anxiety/emotional	Heart
4. Heart	Heart	Hypertension
5. Nervous system	Hypertension	Diabetes
6. Depression/anxiety/emotional	Diabetes	Depression/anxiety/emotional
7. Stroke	Lung/breathing problem	Lung/breathing problem
8. Lung/breathing problem	Nervous system	Fracture/bone/joint injury
9. Fracture/bone/joint injury	Vision	Musculoskeletal
10. Vision	Fracture/bone/joint injury	Vision

Aged 65+

ADL

ADL or IADL

- 1. ArthritisArt2. HeartHeat3. StrokeVis4. HypertensionHyp5. DiabetesDia6. VisionStroke7. SenilityLung8. Lung/breathing problemBac9. HearingFra10. Fracture/bone/joint injurySer
 - Arthritis Heart Vision Hypertension Diabetes Stroke Lung/breathing problem Back/neck pain Fracture/bone/joint injury Senility

Any Limitation

Arthritis Heart Hypertension Back/neck pain Diabetes Vision Lung/breathing problem Fracture/bone/joint injury Stroke Hearing