

DISABILITY, DEMOGRAPHY OF

Disability is one dimension of morbidity, or ill health. In the United States disability is defined as the inability because of poor health to perform tasks or social roles that are considered normal for one's age. Disability is the end of a process of health change that begins with the onset of diseases and conditions that may lead to the impairment or loss of function—the loss of the physical ability to perform certain tasks or motions—and then to disability. The process is termed the “disability process” by Lois Verbrugge and Alan Jette and is shown in Figure 1.

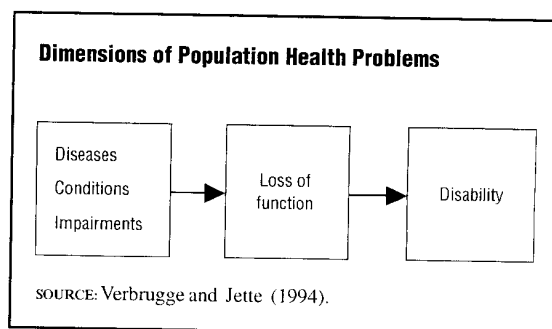
Definitions

The distinction between disability and impairment and loss of function is that disability can be affected by the circumstances of a person's environment or the demands of social roles, whereas loss of function is internal to the person. Loss of function occurs “within the skin”; disability results from a combination of factors “within” and “outside the skin.” A complication of cross-national research on disability is that countries that employ the World Health Organization's International Classification of Impairment, Disability, and Handicap (ICIDH) define disability the way researchers in the United States define impairment and use the word *handicap* to define what is known as disability in the United States.

Disability thus often is defined in terms of the normal tasks in various age groups. For young people school disability is the inability to attend a mainstream school. For those in the working ages work disability is the inability to perform the tasks required at work. For older persons disability often is defined in terms of the inability to live independently and provide self-care. Operationally, this often is measured as the ability to perform what are called “activities of daily living” and “instrumental activities of daily living.”

As these definitions make clear, changes in the environment without changes in innate ability can affect the level of disability. This fact underlies the Americans with Disabilities Act of 1990. Schools that provide services for children with functioning problems can reduce school-age disability; workplace adaptations can reduce work disability; and the development of technology and assistive devices as well as changes in housing design can reduce old-age disability.

FIGURE 1



Levels of Disability

The level of disability is related to both age and sex. Generally, as a person's age increases, the level of disability increases because of the greater incidence of specific diseases and conditions, both physical and mental, and loss of function. For instance, among non-institutionalized American males in 1997 the proportion with disability or some limitation in activity ranged from 7 percent at age 18 to 36 percent at age 65 and over. Women generally report higher levels of disability in the older ages; the proportion with limitations in activity among women 65 and over was 42 percent in 1997. This is related to women's higher levels of morbid diseases such as arthritis.

Persons of lower socioeconomic status have higher levels of disability than do those of higher status. In the United States in 1997, 25 percent of persons with family incomes less than \$20,000 were limited in activity; this was true of only 6 percent of persons from households with incomes of \$75,000 and over. The relationship between socioeconomic status and disability is caused by numerous risk factors and life circumstances related to lower status and the earlier onset of all dimensions of morbidity.

Unlike mortality, disability is not an “absorbing” state. It is a state of impaired health from which a person can recover and that a person then can re-enter. People may experience a number of periods of significant disability in their lives or may never be disabled. Although many people experience significant disability in the last year of life, some individuals die without experiencing loss of function or disability.

The level of disability has declined since the early 1980s among some segments of the American population. This is generally true for the older popu-

lation, but the decline appears to be concentrated among those with higher socioeconomic status.

The level of disability in a population results from a combination of the rate of incidence of disability and the rates of survival among those with and without disability. It is possible for mortality decline to result in a longer-lived disabled population and increases in age-specific levels of disability. Researchers in a number of countries have found evidence that would support this set of circumstances for the period of the 1970s. Many countries, however, have experienced reductions in disability along with reductions in mortality that began by the 1980s.

The Decline in Disability

The decline in disability in the United States appears to be related to the increase in education among the older population. It is possible that this trend reflects current educational shifts and may not continue with increases in education at higher levels. In addition, the pattern of change for some younger cohorts is not promising. Middle-aged cohorts born in the baby-boom years report higher levels of disability at these ages than earlier cohorts did. In the past age-specific disability increased regularly as a cohort aged, implying that the baby boom cohort may have higher levels of disability in old age than current cohorts of older persons.

See also: *Accidents; Aging of Population; Disease, Burden of.*

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DISASTERS

Disasters are sudden, large-scale events that result in substantial numbers of deaths and injuries or severe economic losses. Natural disasters, the subject of this article, are disasters that are not precipitated by human agency. A disaster occurs when vulnerable people are severely impacted by a hazard in a way that recovery is unlikely without external aid. Vulnerability is a function of a group's socioeconomic condition; the poor are more vulnerable than the rich.

Deaths and Injuries

According to the International Federation of Red Cross and Red Crescent Societies (IFRC), a total of 39,073 people were reported killed by disasters in 2001. This figure is lower than the decade's annual average of around 62,000. Earthquakes proved to be the world's deadliest disasters, accounting for over half the year's toll. Over the decade, however, hydro-meteorological hazards have claimed 71 percent of all lives lost to disasters.

From 1992–2001, countries of Low Human Development (LHD) have accounted for just one-fifth of the total number of disasters, but over half of all disaster fatalities. On average 13 times more people die per reported disaster in LHD countries than in countries of high human development. In 2001, a total of 170 million people were reported affected by disasters (IFRC 2002).