

CONDITIONS AND IMPAIRMENTS AMONG THE WORKING-AGE POPULATION WITH DISABILITIES

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I. BACKGROUND AND PURPOSE

Most adults with disabilities are in their working (not their elderly) years. According to the 1990 Survey of Income and Program Participation (SIPP), among the civilian non-institutionalized population, 20,266,000 adults in their working years (18-64) and 15,413,000 elderly persons (65+) reported a disability. (Adler) Disability rates were lower for the working-age (13.7 percent) than for the elderly (49 percent), but the enormous size of the World War II "baby boom" resulted in large numbers of people aged 18-64 with disabilities.

Few recent disability data sources exist on ages 18-64 and fewer still on specific disabling conditions or impairments. No reliable national estimates exist on many disabling conditions (i.e. mental retardation or other developmental disabilities).

Conditions/impairments resulting in disability for the 18-64 year age span can begin in childhood (i.e. mental retardation, cerebral palsy), emerge in early or middle adulthood (i.e. schizophrenia), or appear before age 65, but be associated with aging (i.e. arthritis). (LaPlante) Thus, there is a great deal of variation in disabling conditions/impairments among the working-age population -- more so than among children or the elderly. Yet, too often, the working-age disabled population is viewed as a single homogeneous group.

Policies and interventions can affect different condition/impairment groups in diverse, unintended, ways. Federal program eligibility criteria and services sometimes differ by conditions and impairments (i.e. eligibility criteria for legally blind persons are more lenient in SSI and SSDI). Historically, disability issues have often addressed only certain populations (i.e. veterans, children) or certain conditions/impairments (i.e. MR, blind).

Ten condition/impairments were selected for analysis on the basis of prevalence and policy relevance. These are: (1) mental retardation or other developmental disabilities (i.e. cerebral palsy, autism, epilepsy) or MR/DD, (2) mental illness, (3) cancer, (4) spinal cord injury (SCI), (5) heart disease, (6) respiratory conditions, (7) arthritis, (8) bad back, (9) hearing impairments, and (10) visual impairments. Other conditions/impairments were too small for separate analyses (i.e. multiple sclerosis, diabetes, stroke), but are included in estimates of the entire disabled population. Two hypotheses are examined: (1)

does the disabled working-age population differ from the general population; and (2) are the differences within the disabled population among major condition/impairment groups.

II. Data Source and Definitions

Data Source

Data came from Wave 3 of the 1990 Survey of Income and Program Participation (SIPP), a nationally representative survey of adults aged 15 or over in the civilian non-institutionalized population. The SIPP cluster sample consisted of 22,000 households (and group homes with less than 9 residents): 19,000 from a national probability sample and 3,000 from an oversample, which included minority headed households, households consisting of relatives with no spouse present, and a random sample of other households. Altogether, 9,000 working-age sampled respondents had disabilities. Weights from the public-use tape and calculated for Wave 3 and for the common month September were used.

Definitions

Disability is commonly defined as a limitation or inability to perform age/gender/culture-specific functions or tasks as a result of a medical condition or impairment. Working-age people are often considered disabled if they have difficulty with or cannot take care of basic needs, perform certain activities, or work. Disabilities result from medical conditions, (i.e. diseases, such as cancer, heart disease), injuries (i.e. SCI); or impairments, often defined as a loss of function (i.e. blindness or loss of limb).

Functional disability measures in SIPP were defined as difficulty with or inability to perform age-appropriate functions due to a physical or mental condition or impairment. A person with a functional disability reported at least one of the following: (1) visual impairment (difficulty or inability to see or read ordinary newsprint even with glasses); (2) hearing impairment (difficulty or inability to hear normal conversation); (3) speech impairment (difficulty or inability to have one's speech understood); (4) difficulty or inability in performing at least 1 of 4 functions (i.e. lifting 10 lbs., climbing a flight of stairs, walking 3 city blocks, getting around inside the home); OR, (5) difficulty with at least 1 of 5 activities of daily living or ADLs (i.e. getting into or out of a bed or chair, bathing, dressing, eating, toileting); OR, (6) difficulty with at least 1 of 5 instrumental activities of daily living or IADLs (i.e. using the telephone, going outside the home, keeping track of money and

bills, preparing meals, doing light housework). Work disability (i.e. the ability to work) was analyzed, but did not serve as the basis for analysis.

Condition/impairment data were obtained through the use of a flashcard shown to respondents who reported a functional disability. Respondents could select up to 3 conditions/impairments from 30 listed on the flashcard, thus allowing the possibility of multiple disabling conditions/impairments. Regardless of disability, all respondents were asked whether they had: (1) learning disabilities, (2) mental retardation, (3) developmental disabilities, (4) Alzheimer's disease or other senility, and (5) mental or emotional conditions.

III. RESULTS: WORKING-AGE POPULATION

A. DEMOGRAPHIC CHARACTERISTICS

Prevalence estimates are the number of people with a specific condition/impairment. Prevalence estimates for disabling condition/impairments include only those people whose specific condition/impairment is disabling. Thus, prevalence estimates for disabling conditions/impairments are lower than overall prevalence estimates (i.e. 2,436,000 working-age persons who reported mental illness in SIPP, only 1,455,000 (59.7%) reported their mental illness as disabling. SIPP prevalence estimates for disabling conditions were: (1) MR/DD - 1,281,800; (2) mental illness - 1,455,800; (3) cancer - 460,400; (4) SCI - 379,800; (5) heart disease - 1,774,000; (6) respiratory conditions - 1,554,900; (7) arthritis - 2,891,000; (8) bad back - 7,121,600; (9) hearing impairment - 5,489,700; (10) visual impairment - 5,228,700; and (11) all disabilities - 20,266,000.

Age People with disabilities tended to be significantly older than those in the general population. The median age of people with disabilities is 42 -- 6 years older than the general population whose median age was 36. Among the disabled population, persons with MR/DD were significantly younger (37.5); those with heart disease (57), arthritis (55), and respiratory conditions (53) were significantly older, and no significant differences were found among those with mental illness (44.5), SCI (45), bad back (46), hearing impairment (47), visual impairment (48), or cancer (52).

Gender No statistical differences were found between the proportion of males in the general (48.9%) and in the disabled working-age populations (46.2%), unlike the situation with children with disabilities, where 3 in 5 are boys (62.6%) or the elderly, where 3 in 5 (60%) are women. Among condition/impairment groups, significant gender differences were found in the proportion of males among those with arthritis (25%, bad back (67.6%), and hearing impairment (67.4%). No significant differences were found in the proportion of males with cancer (36.5%), respiratory

conditions (39.1%), visual impairments (42.5%), mental illness (46.8%), heart disease (47.1%), or SCI (52.7%).

Race/Ethnicity No differences were found between the general and disabled working-age populations in the proportion of White non-Hispanics or African-Americans. The general working-age population is 77.8% White (non-Hispanic) and 11.6% African-American, with the remaining 10.6% "Other" category composed of Hispanics, American Indians, Alaska Natives, and Asians; whereas the disabled population was 76.2% White, 10.1% African-American, and 13.7% "Other". Within the disabled population, significant racial differences were only found among persons with hearing impairments who were significantly more likely to be White (85.6%) and those with visual impairments, who were significantly less likely to be White (69.3%) and more likely to be African-American (17.5%). No significant differences were found among those with MR/DD (66.3% White, 21.6% African-American), mental illness (73% White, 14.5% African American), cancer (77% White, 17% African-American), SCI (67.4% White, 16.1% African-American), heart disease (73.8% White, 15.3% African-American), respiratory conditions (76.3% White, 12.9% African-American), arthritis (78.5% White, 14.3% African-American), bad back (79.5% White, 11.1% African-American) and hearing impairment (7.7% African-American).

Educational Attainment Educational attainment was significantly lower for people with disabilities than for the general population. Reasons are unclear, but since Special Education and other mainstreaming efforts did not begin until most working-age people were out of school, this may have been a contributing factor. About 1 in 3 (34.4%) of those with disabilities did not complete high school: nearly twice the proportion as the general population (18%). Significantly lower shares of persons with disabilities had at least some college (31.5%) compared to almost half (47.2%) of the general population. Two condition/impairment groups had significantly lower levels of graduating from high school compared to the already low level of the disabled population: 56.1% of those with MR/DD and 43.8% of those with visual impairments did not finish high school. The following proportions who did not finish high school among the other groups was not significant: mental illness (46%), cancer (23.4%), SCI (27.8%), heart disease (43.3%), respiratory conditions (44%), arthritis (40.2%), bad back (35.5%), and hearing impairment (33.4%).

B. DISABILITY AND EMPLOYMENT

Long-term care needs, (i.e. needing the help of another person in order to perform basic ADL or IADL functions) are common measures of severe disability. Assistance from another person can be in the form of direct hands-on assistance or, as in the case of many persons with mental or cognitive impairments, through reminders or supervision.

Long-term care needs were present in 21.6% of the entire disabled population. Seven condition/impairment groups were significantly more likely than the entire disabled population to need long-term care: MR/DD (63.2%), mental illness (51.1%), SCI (49.1%), cancer (41%), respiratory conditions (29.5%), arthritis (28.3%), and bad back (26.6%). No significant differences were found among those with visual impairments (25%) and heart disease (23.5%). Persons with hearing impairments were the only group significantly less likely to need long-term care (17.2%)

Ability to Work Work disability measures whether or not a medical condition/impairment prevents or limits ability to work. Work disability is a combination of subjective, financial, health and disability-related factors. Among the general population, few persons indicated that they were prevented (4.8%) or limited in their ability to work (6.4%). Among the disabled population, 29% were prevented from and another 25% were limited in ability to work.

9 condition/impairment groups were significantly more likely to be prevented from working than the entire population with disabilities: mentally ill (60.6%), MR/DD (58.8%), cancer (51.1%), heart disease (49%), SCI (47.6%), respiratory conditions (44.3%), arthritis (43.7%), bad back (36.4%), and visual impairments (33.4%). Persons with hearing impairments were significantly less likely to be prevented from working (20.8%).

Employment is perhaps the single most critical issue for people with disabilities. The 1989 American with Disabilities Act (ADA), which guarantees the civil rights of people with disabilities, contains key provisions on nondiscrimination in hiring, employment, and workplace accommodations. Yet, only about half of persons aged 18-64 with disabilities (50.6%) were employed either full or part-time: significantly lower than the 74.6% employment rate found in the general population. Among the disabled population, 9 of the 10 condition/impairment groups were significantly less likely to be employed and none had employment rates as high as the general population.

Employment rates were significantly lower than the entire disabled population for MR/DD (18.1%), mental illness (22.5%), heart disease (30.4%), cancer (31.9%), arthritis (33.6%), respiratory conditions (36.1%), SCI (36.3%), visual impairments (44%), and bad back (45.2%). The hearing impaired were significantly more likely to be employed (62.4%) than the disabled population.

C. MARITAL STATUS AND LIVING ARRANGEMENTS

Marital Status No significant differences were found in the proportion of married persons among the general (59.6%) and disabled

(57.5%) populations. In the general population, 14.6% had been married, but were now currently single, due to separation, divorce, or widowhood compared to a significantly higher rate of 24% among the disabled. The proportion of persons who never married was significantly lower in the disabled (18.5%) than in the general population (25.8%). Within the disabled population, the mentally ill and the MR/DD were significantly less likely to be married (30.2% and 19.5%, respectively) and significantly more likely to have never married (34.9% and 68.3%, respectively). Several groups were significantly less likely to have never married: those with heart disease (6.9%), arthritis (7.1%), and bad back (12.5%). No significant differences were found in those who never married among those with cancer (13%), respiratory conditions (13.9%), hearing impairment (16.2%), visual impairment (17%), and SCI (17.6%).

Types of Living Arrangements include living alone, married, unmarried (living with relatives), and unmarried (living with non-relatives). The latter arrangement is becoming more common for those with MR/DD and mental illness, due to the national rise of the independent living movement and de-institutionalization efforts begun decades ago.

Persons in the disabled population were significantly more likely to live alone (13%) than those in the general (9.2%) population. Significant differences were not found in other living arrangements: 23.5% of the disabled and 24.2% of the general population were unmarried (living with relatives) and 5.8% of the disabled and 6.9% of the general populations were unmarried (living with non-relatives). It was not possible to determine if disability or financial circumstances was the overriding reason why so many unmarried disabled adults lived with others. Within the disabled population, the proportion of unmarried persons who lived with relatives was significantly higher for the MR/DD (62.8%) and the mentally ill (38.2%). No significant differences were found cancer (18.5%), SCI (18.4%), heart disease (19.2%), respiratory conditions (23.4%), arthritis (17.5%), bad back (20%), or hearing (19.5%) or visual impairments (25.6%).

D. POVERTY/FEDERAL PROGRAM PARTICIPATION

Poverty People with disabilities were significantly more likely to live in poverty (18.3%) than those in the general population (9.9%). In 1990, the poverty threshold (based on income and family size) for a family of 4 was \$13,359. (Department of Commerce) Since income for the working-age population is derived almost entirely from employment and since employment rates are low for those with disabilities, high poverty rates are not surprising. Within the disabled population,

significantly higher poverty rates were found among persons with mental illness (28.6%), respiratory conditions (25.3%) and visual impairments (24.5%). No significant differences were found for MR/DD (17.2%), cancer (19.4%), heart disease (20.7%), arthritis (19.1%), bad back (20.9%), and SCI (23.8%). Persons with hearing impairments were significantly less likely to live in poverty (15.1%).

Programmatic poverty measures are used to determine eligibility for means-tested Federal disability programs (i.e. SSI). Programmatic poverty, based like standard poverty measures on family size and income, differs only in the case of an unmarried adult who lives with relatives, where only the income of the unmarried adult (not the rest of the family) is counted. Programmatic poverty levels tend to be higher than standard poverty measures.

Using programmatic measures, the disabled population was significantly more likely (22.3%) than the general population to be poor (13.2%). Among the disabled population, programmatic poverty rates were significantly higher for MR/DD (56.8%), mental illness (44.9%) and visual impairments (27.7%). No significant differences were found among those with cancer (22%), SCI (26.1%), heart disease (22.8%), respiratory conditions (26.6%), arthritis (22.1%), and bad back (20.9%). Persons with hearing impairments were significantly less levels to be poor (18.9%) than all those with disabilities.

Supplemental Security Income (SSI), a means-tested Federal program, provides monthly cash benefits to low-income aged (age 65+), blind, and disabled persons. About 8.1% of the working-age population with disabilities received SSI. Two groups significantly more likely to receive SSI among the disabled population were the mentally ill (25.6%) and the MR/DD (43.2%); 2 of the 3 groups with significantly higher programmatic poverty than the disabled population. The third such group, the visually impaired, are subject to less stringent SSI eligibility criteria, but their rate of SSI receipt (11.3%) was not significantly higher than the disabled population.

Social Security Disability Insurance (SSDI), a non-means-tested program, provides monthly cash benefits to disabled workers under 65 and to certain of their dependents. Disabled persons receive SSDI on their own as disabled workers, as widows or widowers (aged 50-59) of insured individuals, and as adults aged 18-64 who became disabled in childhood whose parent(s) either receive SSDI, are Social Security retirees, or who are deceased (but were insured under Social Security). The latter category contains many MR/DD.

13% of the disabled working-age population received SSDI. Within the disabled

population, significantly higher proportions of SSDI beneficiaries were found among persons with SCI (36.2%), mental illness (33.6%), MR/DD (32.7%), heart disease (27.2%), and respiratory conditions (22.6%). No significant differences were found among those with cancer (29.4%), arthritis (18.9%), bad back (13.4%), hearing impairment (10.3%), and visual impairment (16%). Again, it is surprising that participation rate for the visually impaired (16%) were not significantly different considering that the more lenient SSI eligibility criteria for legally blind persons are also used in SSDI.

Food Stamps are designed to increase the food purchasing power of eligible low-income households so that they can obtain a nutritionally adequate low-cost diet. The disabled population was significantly more likely to receive food stamps (11.7%) than the general population (4.9%). Within the disabled population, those with visual impairments were significantly more likely to receive food stamps (17%). No significant differences were found for MR/DD (11.9%), mental illness (20%), cancer (10.8%), SCI (16%), heart disease (14.5%), respiratory conditions (18.2%), arthritis (14.6%), bad back (13.6%), and hearing impairment (8.5%).

E. PUBLIC AND PRIVATE HEALTH INSURANCE

Health insurance comes from public (i.e. Medicaid, Medicare) and private (i.e. mostly from employers with some from large groups or direct individual purchases). Rates of public insurance are high, because among the disabled, employment rates are low and pre-existing condition clauses and high premiums prevent many from private insurance.

Medicaid pays for the health care of low-income and medically indigent individuals. Most working-age individuals with disabilities on Medicaid also receive SSI, which guarantees Medicaid eligibility in most states. There are also a number of optional state programs by which ill or disabled persons not getting SSI can get Medicaid. Eligibility for Medicaid is complex and varies from state to state. People with comparable illnesses, disabilities, and incomes may be eligible for Medicaid in one state, but not in another. Persons who receive Aid to Families with Dependent Children (AFDC) are automatically entitled to Medicaid.

The working-age disabled population was significantly more likely to receive Medicaid (14.9%) than the general population (5%). Within the disabled population, only the mentally ill (34.8%) and the MR/DD (51%) were significantly more likely to receive Medicaid reflecting the higher SSI participation of those two groups. Medicaid participation was not significantly higher than the disabled population for those with cancer (15.7%), SCI (20.9%), heart disease (17.1%), respiratory conditions (20%), arthritis (13.3%), bad back

(14.5%), hearing impairment (11.5%), and visual impairment (19.3%).

Medicare provides health insurance coverage to persons aged 65+ and to working-age disabled persons 24-months after first receiving SSDI benefits and to persons in the End-Stage Renal Disease (ESRD) program after 3 months. According to an 1989 study, about 12.8% of workers newly entitled to SSDI, died before the end of the 24-month waiting period. Many with chronic illnesses (i.e. cancer, AIDS), did not survive long enough to become eligible for Medicare. (Bye, Riley)

Slightly more than 1 in 10 (11.4%) of the working-age disabled population was enrolled in Medicare. Within the disabled population, only those with MR/DD (41.6%), mental illness (26.3%), and arthritis (18.5%) were significantly more likely to be on Medicare. Medicare enrollment was not significantly higher for cancer (25.4%), SCI (28.7%), heart disease (24%), respiratory conditions (16.2%), bad back (12.8%), hearing impairment (10.3%), and visual impairment (14%).

Medicare and Medicaid can be received simultaneously, usually by persons receiving both SSDI and SSI: about 3% of the disabled population. Among condition/impairment groups, only the proportion of those with MR/DD (21%), was significantly higher than the disabled population. Participation rates for Medicare and Medicaid were: mental illness (8.9%), cancer (7.9%), SCI (9.8%), heart disease (2.9%), respiratory conditions (2.6%), arthritis (3.6%), bad back (2.5%), hearing (2.6%) and visual (4.4%) impairments.

The presence of either private insurance and other public insurance (i.e. military, VA, Indian Health Service) were significantly higher among the general (78.8%) than among the disabled (59.7%) populations. Within the disabled population, significantly lower proportions of those with MR/DD (18.9%), mental illness (29.8%), heart disease (46.2%), and visual impairments (52%) had coverage from either private or other public sources. No significant differences were found among persons with cancer (48.7%), SCI (46.4%), respiratory conditions (49.6%), arthritis (56.7%), and bad back (56.3%). Persons with hearing impairments were significantly more likely than the entire disabled population (65.9%) to have coverage from private or other public plans.

No health insurance was found in 14.9% of the general and 17% of the disabled populations - not a significant difference. Within the disabled population, no condition/impairment group was significantly more or less likely to be uninsured. The share without insurance was MR/DD (9.5%), mental illness (18%), cancer (18.1%), SCI (13.8%), heart disease (15.6%), respiratory conditions (16.7%), arthritis

(15.1%), bad back (18.9%), and hearing (14.9%) and visual impairments (19%).

F. HEALTH STATUS AND UTILIZATION

Health status is a subjectively measured by asking respondents to rate their own health as excellent, very good, good, fair, or poor. Persons with disabilities rated their health as significantly worse than the general population: only 10.1% of the general population rated their health as fair or poor compared to nearly half (47.4%) of the disabled population. Within the disabled population, significantly higher proportions of those with fair or poor health were found among persons with heart disease (82%), cancer (81.2%), respiratory conditions (74.2%), mental illness (68.7%), arthritis (67.6%), bad back (62.7%), and visual impairments (53%). No significant differences were found among persons with SCI (60.5%) and MR/DD (50%). Persons with hearing impairments had significantly lower levels of fair or poor health (36.9%) compared to the disabled population.

Bed-days, (i.e. number of days spent in bed due to illness, injury, or disability in the last 4 months) is another health measure. Persons with disabilities were significantly more likely to have spent at least 2 weeks in the last 4 months in bed (11.3%) compared to the general population (2.5%).

Among those with disabilities, significantly higher proportions of those who spent at least 2 weeks in the last 4 months in bed were found among those with mental illness (23.9%), cancer (37.8%), SCI (35.3%), respiratory conditions (19.6%), arthritis (15.8%), and bad back (17.4%). No significant differences were found among those with MR/DD (9.2%), heart disease (14.3%), and hearing impairments (13.2%).

Physician visits nationwide have remained steady at about 5 or 6 visits per year. Significantly greater proportions of people with disabilities reported 1+ physician visits in a 4-month period: 64.6% of the disabled and 45.2% of the general populations. Within the disabled population, a significantly higher proportion of persons with heart disease (82.6%), cancer (80.1%), respiratory conditions and arthritis (both with 75.8%), and bad back (72.2%) reported 1+ physician visits. A significantly lower proportion was found (58%) for the hearing impaired.

High numbers of physician visits (5+ in the last 4 months) were significantly more likely among the disabled (17.8%) than among the general populations (6.5%). Within the disabled population, significant proportions of 5+ physician visits were found among those with cancer (42.7%), mental illness (27.9%), bad back (26.7%), and heart disease (24.5%). No significant differences were found among those with MR/DD (13.2%), SCI (25.5%), respiratory conditions (22%), and arthritis

(21%). A significantly lower proportion was found among the hearing impaired (13.5%).

Overnight hospital stays in the last year were significantly more likely among the disabled (18.1%) than among the general populations (8%). Among the disabled population, significantly higher proportions of persons with cancer (48.5%), heart disease (35%), and mental illness (27.9%) had at least one overnight hospital stay. No significant differences were found among those with MR/DD (15.9%), SCI (30.1%), respiratory conditions (23.7%), arthritis (16.5%), bad back (17.2%), hearing impairment (16%) and visual impairment (18%).

IV. CONCLUSIONS

Disabled and General Population Differences

The working-age population is significantly different from the general population in many ways. Those with disabilities are significantly less likely to have finished high school and to be employed either full or part-time. Thus, poverty rates are significantly higher and there is significantly greater reliance on Federal programs which provide cash support (SSDI and SSI) and pay for health care (Medicare and Medicaid). Significantly lower proportions of persons with disabilities were able to work, higher proportions spent more days in bed for health reasons, and health care utilization was significantly higher for persons with disabilities.

Differences in Condition/Impairment Groups

Within the disabled population, several groups were strikingly different. Persons with mental illness or MR/DD were significantly less likely to be employed, married, and need long-term care. They were also significantly more likely to live in poverty and rely on Federal programs. Health status and the utilization of health care was not significantly different for those with MR/DD than for all those with disabilities. However, health care utilization was significantly higher for persons with mental illness than for the entire disabled population.

Persons with chronic diseases typically did not significantly differ from the overall disabled population in educational attainment, poverty, or reliance on Federal programs (although a higher proportion of those with SCI received SSDI). However, persons with chronic diseases were much more likely to need long-term care, to be in fair or poor health, and to use health care.

People with visual impairments were more likely to be poor, to be African-American, to have not graduated from high school, to rely on food stamps (but not SSI or SSDI), and to be in fair or poor health. No significant

differences were found in long-term care needs or health care utilization.

Individuals with hearing impairments stood out, because compared to the disabled population, they were significantly better off. They were significantly more likely to be male, White, and employed and less significantly likely to be poor, rely on Federal programs, need long-term care, be in fair or poor health, or use health care.

Looking at condition/impairment groups, numerous questions arise which cannot be answered by using SIPP data. What are differences between people whose disability began at birth or in childhood compared to those who became disabled as adults? What effects do duration and age of onset of disability have on factors such as education, employment, Federal program participation, health insurance, and income? What about multiple conditions and secondary disabilities? Are there race, gender, generational differences within condition and impairment groups? Many questions can be addressed by the first public-use data tape to be released in April 1996 from 1994/95 Disability Survey.

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