Disability-based discrimination and health: findings from an Australian-based population study

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Abstract

Objective: Among working-age Australian adults with a disability, we assess the association between disability-based discrimination and both overall health and psychological distress.

Methods: Using data from the 2015 Australian Bureau of Statistics Survey of Disability, Ageing and Carers we estimated the proportion of working-age women and men (15–64 years) with disability who report disability-based discrimination by socio-demographic characteristics and assessed the association between disability-based discrimination and self-reported health and psychological distress.

Results: Nearly 14% of Australians with disability reported disability-based discrimination in the previous year. Disability-based discrimination was more common among people living in more disadvantaged circumstances (unemployed, low income, lower-status occupations), younger people and people born in English-speaking countries. Disability-based discrimination was associated with higher levels of psychological distress (OR: 2.53, 95%CI: 2.11, 3.02) and poorer self-reported health (OR: 1.63, 95%CI: 1.37, 1.95).

Conclusion: Disability-based discrimination is a prevalent, important determinant of health for Australians with disability.

Implications for public health: Disability-based discrimination is an under-recognised public health problem that is likely to contribute to disability-based health inequities. Public health policy, research and practice needs to concentrate efforts on developing policy and programs that reduce discrimination experienced by Australians with disability.

Key words: disability, discrimination, self-reported health, psychological distress, ableism

Stigma and discrimination are important determinants of population health and health inequalities. The detrimental mental health effects of self-reported interpersonal discrimination are well established.[1,2] Disability-based discrimination is a day-to-day reality for many Australians with disability[3,4] and is likely to have wide-ranging effects on their health and social and economic circumstances .

Discrimination is the avoidable, unfair treatment of social groups, and of individuals perceived as belonging to these groups, including groups based on characteristics such as gender, ethnicity and disability. Discrimination is conceptualised as a psychosocial stressor that heightens physiological responses (such as blood pressure and cortisol secretion), having downstream effects on health and wellbeing.[2] Studies of self-reported discrimination and health predominantly focus on racial and gender discrimination.[2] Few studies have examined self-reported discrimination among those with other stigmatised identities, such as people with a disability.[5] There are few quantitative studies of self-reported disability-based discrimination and health internationally[6] and none in Australia. There is an urgent need to understand the population prevalence of disability-based discrimination and the related health impacts.

In 2015, the Survey of Disability, Ageing and Carers (SDAC) collected the first Australian population-based data on interpersonal disability-based discrimination.[7] We analysed data from 6,183 participants aged 15–64 years with disability. We estimated: 1) the prevalence of self-reported inter-personal disability-based discrimination; 2) whether disability-based discrimination varied by socio-demographic characteristics; and 3) the associations between disability-based discrimination and the self-rated health and psychological wellbeing.

Method

Data source

We used the Confidentialised Unit Record Files of the SDAC 2015, a repeat cross-sectional national survey conducted by the Australian Bureau of Statistics (ABS).[7] The total sample size was 74,862. Our analysis is restricted to 40,872 working age adults (15–64-year-olds) of whom 15.1% (n=6,183) reported a disability.

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Disability measures

Participants were defined as having a disability if they had a limitation, impairment or restriction in everyday activities that had lasted, or was likely to last, for a period of six months or more. The ABS uses a module with 149 questions to collect information on disability and originally classified participants disability as: profound, severe, moderate, mild, employment restriction, non-specific restriction and no disability, based on the level of functioning in core activities (self-care, mobility and communication). We further combined the profound and severe group in our analysis.[8] Impairment type was classified by the ABS as: sight/hearing/speech, intellectual, physical, psychological, and acquired brain injury, with people able to be classified as having multiple types of impairment. For further detail of the original data source, see the SDAC Summary of Findings available from the ABS.[7]

Disability-Discrimination measure

Participants were asked "*In the last 12 months do you feel that you have experienced discrimination or have been treated unfairly by others because of your [condition/s]?*" (yes/no).

Health outcome measures

General health was assessed with one question asking, *"In general would you say your health is excellent, very good, good, fair or poor?"* Self-reported health was then categorised as a binary variable ('fair/poor' versus 'excellent/very good/good'). Psychological distress was assessed using the Kessler Psychological Distress Scale (K10),[9] which has 10 questions that determine the level of anxiety and depression in the past four weeks (with a 5-level response option). Responses were originally categorised into a continuous score (ranging from 10 to 50). For regression models, responses to the K10 were collapsed into 'very high distress/high distress' (scores from 10 to 21) versus 'moderate/low distress' (scores from 22 to 50), a classification that has been used previously.[10]

Analysis

Analyses were conducted in Stata 11.1.[11] We estimated the population-weighted prevalence of discrimination and used logistic regression to examine the association between discrimination and self-rated health and psychological distress adjusting for age, sex, country of birth, disability severity, education, income and labour force status. As a sensitivity analysis, we also ran models that omitted people reporting psychological impairments (n=1,729) who may be more likely to report discrimination and poor mental and physical health.

Results

Prevalence of discrimination

Nearly 14% of people with disability aged 15 to 64 years reported disability-based discrimination in the past year, with similar estimates for men and women (Table 1). Younger people reported experiencing much higher levels than older people (20.4%, 15 to 24 years versus 9.4%, aged 55 to 64 years). The highest levels of discrimination were reported among those with a severe or profound restriction (21.6%) and the lowest levels were among those with no specific restriction (4.2%). People with intellectual or psychological impairments fared the worst; about one in four reported discrimination, whereas 14% of people with physical impairments reported discrimination.

Nearly 30% of unemployed people reported discrimination, compared to 9% who were employed full-time. For employed people, those in higher-skilled occupations (managers) reported lower levels of discrimination (9%), while those in lower skilled occupations (e.g. sales) had slightly higher levels (13%). Discrimination was highest in people in the lowest 20% of household income distribution. People born in non-English speaking countries reported lower levels of disability discrimination than those who were Australian-born.

Regression models

Discrimination was associated with increased odds of psychological distress (OR: 2.53, 95%CI: 2.11, 3.02) and poor self-rated health (OR: 1.63, 95%CI: 1.37, 1.95) in models adjusted for potential confounders. The estimates were attenuated slightly when people with psychological impairments were excluded (psychological distress: OR: 2.21, 95%CI 1.75, 2.79 and poor general health: OR: 1.55, 95%CI: 1.22, 1.97).

Discussion

In this first Australian study of self-reported interpersonal disability-based discrimination, we found a moderate to strong association between disability-based discrimination and self-rated health and psychological distress. Our findings are similar to a Swedish study showing increased odds of psychological distress in relation to perceived disability discrimination (OR: 1.65, 95%CI 1.26, 2.17).[6]

Disability-based discrimination was relatively common, with 14% of people with disability reporting disability-based discrimination in the past year. Discrimination was higher among people who were unemployed, in low-status occupations, younger and living on lower incomes. People with severe disabilities and with psychological and intellectual impairments were more likely to report disability-based discrimination.

Our findings of higher levels of discrimination among some groups suggests that disability may intersect with other social categories and identities to increase the risk of disability-based discrimination. People with more severe disabilities and with psychological and intellectual impairments fare poorly across a number of social and economic indicators such as housing, employment, education and income.[8,12] The higher levels of discrimination they experience are likely to contribute to the poor social and economic outcomes.

It is well documented that people with disabilities have poorer physical and mental health.[13] Our findings that disability-based discrimination is associated with higher psychological distress and poor self-rated health suggests that disability-based discrimination may be an important determinant of the poorer health outcomes.

We used high quality population-based data; however, because the study is cross-sectional it is not possible to exclude reverse causation, although longitudinal studies have found perceived discrimination precedes poor health.[1,2] It is possible that we have not controlled for important confounders. In addition, we relied on self-report of experiences of disability discrimination that previous research has shown can be under and over-reported.[14] Another problem is that we only had measures for inter-personal discrimination; structural or institutional discrimination (e.g. laws, policies) is also likely to be experienced at high levels and to have negative health, social and economic effects.

In summary, we show high levels of disability-based discrimination and demonstrate that discrimination has a moderate to strong association with poorer health. Disability-

based discrimination is an under-recognised public health problem. Addressing disability-based discrimination is likely to reduce social and economic disadvantage and improve the health of Australians with disability.

Implications for public health

Disability-based discrimination is an under-recognised public health problem that is likely to contribute to disability-based health inequities. Reducing disability-related discrimination is likely to bring the social, economic and health benefits for Australians with disability and reduce welfare and health expenditure. Public health policy, research and practice needs to concentrate efforts on developing policy and programs that reduce discrimination experienced by Australians with disability.

Table 1: Population weighted percent of people experiencing discrimination due to their disability with 95% confidence intervals, ages 15 to 65 years.

	% Experiencing discrimination	95% Confidence Interval	
		Lower CI	Upper CI
All persons	**13.8**	**12.8**	**14.9**
Sex			
Males	13.5	12.0	15.1
Females	14.0	12.6	15.5
Age			
15-24	20.4	16.0	25.7
25-34	17.9	14.6	21.8
35-44	16.6	14.0	19.4
45-54	14.2	12.2	16.4
55-64	9.4	8.1	10.9
Disability status			
Profound/ severe	21.6	19.0	24.6
Moderate	15.3	12.9	18.0
Mild	12.9	11.2	14.8
Schooling/ employment restriction	14.5	11.7	17.8
No specific restriction	4.2	2.9	6.1
Impairment type			
Sight, hearing and speech	17.3	14.8	20.1
Intellectual	25.1	21.2	29.5
Physical	14.4	13.2	15.7
Psychological	25.4	22.8	28.1
Acquired brain injury	22.0	17.6	27.0
Other	18.5	16.9	20.3
Accessibility and remoteness index of Australia (ARIA)			
Major cities	13.0	11.8	14.3
Inner regional	15.5	13.3	18.1
Other	14.5	12.0	17.6
Country of birth			
Australia	14.9	13.7	16.2
Other English speaking	13.1	10.0	16.9
Other non-English speaking	7.8	5.8	10.2
Highest level of education			
Bachelor or postgraduate degree	12.5	10.2	15.1
Certificate or diploma	14.5	12.8	16.5
Completed year 12	14.2	11.3	17.5
Some high school	13.0	11.1	15.0
Year 8 or below	13.9	10.0	18.9
Level not determined	18.8	12.5	27.4
Labour force status			
Employed full-time	8.8	7.2	10.6
Employed part-time	12.3	10.2	14.7
Unemployed	29.8	23.6	35.7
Not in the labour force	15.7	14.2	17.4
Occupational skill level			
Managers/ professionals/ technical & trades	8.9	7.2	11.0
Community & personal service/ clerical & admin	11.2	8.7	14.3
Sales/ machinery operators/ labourers	12.0	9.5	15.1
Not applicable	17.2	15.6	18.8
Income quintile			
First (highest)	8.6	6.3	11.6
Second	10.2	7.8	13.1
Third	15.2	12.7	18.1
Fourth	17.2	15.1	19.4
Fifth (lowest)	15.0	12.4	18.0
Unknown	11.2	8.9	14.0

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