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Disabling working environments and mental health: A commentary

Abstract

Employment is a fundamental Social Determinant of Health known to have large impacts on mental health and other health outcomes. Across many countries of the world, people with disabilities are much more likely to be unemployed and looking for work than those without disabilities. The deprivation of employment opportunities is likely to have notable impacts on the health of people with disabilities. In this commentary, we outline the concept of "disabling working environments," which are defined as the range of experiences that affect the likelihood of people with disabilities in obtaining and maintaining quality employment which may then affect a disabled person's health. Disabling working environments are comprised of the following three mutually reinforcing components: 1) Differential selection into work; 2) Selection into certain types of jobs and exposure to poor psychosocial working environments when in employment, and; 3) Differential selection out of work (e.g., leaving employment at an earlier age than those who do not have a disability). We argue that policy and intervention design should consider the life course effects of employment on the mental health of people with disabilities.

Public health perspectives on disability that encompass a population-level approach to enhancing the health of people with disabilities are increasingly recognised as critical to program and policy development [1-3]. To some extent, this is because disability is extremely prevalent, affecting about 12% of the population in high-income countries, and up to 18% of those in lower income countries [4]. Another reason is that people with disabilities face unfair and inequitable treatment, as well as fewer opportunities in life. People with disabilities have lower education, are more likely to be unemployed and have a low income, live in more precarious housing, and face greater discrimination than those without disabilities [4-7]. Lack of access to income, employment and housing (i.e., the Social Determinants of Health) are important explanations for poorer mental health among people with disabilities [8-10].

Alongside the evidence base about the central importance of the Social Determinants of Health (SDOH) in influencing the health of people with disabilities, there is an evolving understanding of how disability should be conceptualised by public health researchers. As such, the International Classification of Functioning, Disability and Health (ICFDH) provides a biological, individual and social perspective of disability [11]. It measures disability according to a person's level of functioning across three domains: body structures and function (e.g. impairment), activities (e.g. dressing) and participation (e.g. economic participation in society), and environmental factors (e.g. barriers or facilitators to participation) [12] at its core. Disability can be visible (e.g. a physical or sensory disability) or invisible (e.g. people with mental health problems). It is also important to acknowledge that disability is not static, and changes over time, most notably in response to changes in the SDOH which might be conceived as

'environmental factors' that are barriers to participation[4] and may influence the dynamics of disability.

A major challenge for people with disabilities is obtaining and maintaining meaningful employment. Among those who are looking for work in OECD countries, the unemployment rate among people with disabilities is more than twice that of those persons without disabilities [7]. In low income countries, there is also evidence to suggest that prevalence of disability is higher among those who are not in employment [13]. When people with disabilities are employed they tend to have poorer quality jobs than those working without disability [14], characterised by lower job security, lower control, and higher psychological demands . The lack of quality employment among people with disabilities is likely to have considerable impacts on their mental wellbeing, given that unemployment [15] and poor-quality work [16 17] are known to be associated with lower mental health in people without disabilities. Aside from this, employment provides a number of intertwined tangible (e.g., income) and intangible benefits including a sense of time structure to the day, collective purpose, social contact and social support, social status, and activity [18-20]. So, it is likely that deprivation of employment impacts on the mental health of people with disabilities both directly (through loss of income) and indirectly (through loss of intangible benefits). In stating this, it is necessary to acknowledge that the desire or ability to work among those with disability is dependent on a range of individual, social and economic circumstances, many of which are disability related.

The purpose of this commentary is to introduce the concept of "disabling working environments." Using themes identified through a narrative review, we have

constructed a framework to guide future research and policy, and have assembled evidence of the (mental) health effects of disabling working environments, thus demonstrating the importance of the framework to public health. Mental health problems are the result of both biological factors, as well as changes in the social environment, such as those related to work and the workplace [21].

Conceptualisation of disabling working environments

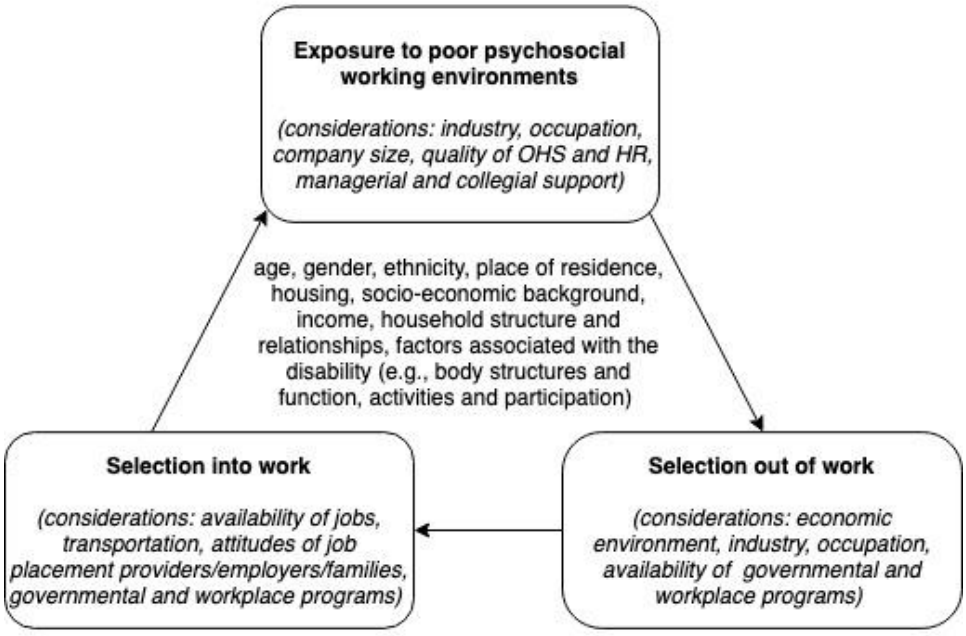
Disabling working environments are defined as the range of experiences that affect the likelihood of people with disabilities of obtaining and maintaining quality employment which may then affect a disabled person's health. It is a distinct and broader concept than the body of research about the effect of workplace stress(ors) or poor quality work on the health of the non-disabled population [22] as it also refers to how people with disability enter and exit employment.

From a life course perspective, these experiences may begin at mid to late adolescence when a person comes of working age and may continue throughout the life course. The experience of disabling working environments will also be influenced by a wide range of individual circumstances, including age at acquisition of disability, impairment and level of functioning, life stage, gender, ethnicity, socio-economic background, and household characteristics. These components of disabling working environments can be seen in Figure 1. The presence of disability means that people may be differentially exposed to the experiences described in Figure 1 because of underlying disadvantage, discrimination, and factors related to disability.

It is also highly likely that there is a cyclical relationship between different components of disabling work environments (as demonstrated with arrows in Figure

1). For example, a young person with disabilities may have trouble finding work. Once a job is attained, it may be characterized by insecurity or otherwise poor psychosocial quality. Combined with other situational and individual factors described in Figure 1, the poor quality of these jobs may lead to higher attrition from such jobs, and ultimately from the labour market.

Figure 1. Conceptual description of disabling working environments



Below we further explain each of these components and describe the possible mental health effects of disabling working environments. We conceptualise these mental health effects as secondary conditions that arise following exposure to disabling working environments. We chose mental health as an outcome as this is particularly sensitive to changes in employment status and conditions [23 24]. However, it is important to acknowledge that disabling working environments may have impacts on a range of health outcomes.

In each section below, we first describe the components (e.g., why each might be

different for people with disabilities) (the first paragraph) before then describing the possible mental health effects on people with disabilities (the second paragraph). The description of the mental health effects is not necessarily comparative to those without disabilities. For example, we would argue the concept is able to be applied within a sample of people with disabilities who are, for example, suffering the mental health effects of not being able to find work. It is not necessary to have a comparison to those without disabilities to study this topic in a valid way.

1) Differential selection into work

Evidence suggests that young people with disabilities are much less likely to obtain employment than those young people without disabilities [16 25-28]. Sheltered workshops (employment not in the open labour market sometimes referred to as social enterprises) appear to predominate as work settings among many young people with disabilities, but particularly among those with intellectual disabilities [28 29]. Differential selection into work can also occur among older individuals with disabilities, such as those participating in rehabilitation into work [30] or seeking work through employment agencies [31]. The ability to find work will also be influenced by a range of factors external to the person, such as the availability of suitable jobs, access to transportation to work, and the attitudes and ability of job placement agencies and employers towards hiring a person with disabilities looking for employment. Governmental programs and services to encourage employment participation may also have a role.

There appears to be a lack of studies examining selection of young people with pre-existing disability into work and the impact of this on their mental health, nor any studies examining the mental health impacts of trying and failing to obtain

work/being excluded from employment. It is worth noting that there is a body of literature on different employment models targeting the low rates of employment among young people with mental health problems [32]. These show that intensive models such as Individual Placement and Support (IPS), designed to assist people with chronic severe mental illness to return to mainstream employment, can improve employment outcomes [32]. It is unclear whether these effects are sustainable for young people over the long term [33] or their effects on people's mental health. There is also some evidence about the mental health impacts of "return to work" among those with a disability [34].

2) *Selection into certain types of jobs and exposure to poor psychosocial working environments when in employment.*

People with disabilities are more likely to be employed in lower skilled and entry-level occupations [35-37]. People with disabilities may also be more likely to be working part time [38] or be underemployed [39]. Some research suggests that people with disabilities are more likely to report less equity in terms of remuneration for their work [40] and are more likely to report greater exposure to psychosocial job stressors such as low job control, high job demands, and higher job insecurity than workers without disabilities [14]. The working environment that a person experiences will be determined in part by occupation and industry, as well as company size, and the overall structures and support for the provision of a high-quality psychosocial environment. There may also be specific accommodations and supports which can improve the psychosocial environment of a job, including job coaches, physical

accommodations, and support for health care.

As discussed earlier, the evidence for the effects of poor working environments on mental health is well established. However, recent studies suggest that the negative mental health consequence of poor working environments may be worse for people with disability. One study set in Australia found that workers with disabilities who reported at least one psychosocial job stressor had significant declines in their mental health compared to when they did not report any stressors (however, it is worth noting that being out of employment was associated with the greatest declines in mental health) [41]. These declines were greater among those with disability compared to those without disabilities. Another recent study using the same cohort as above found that lack of access to material factors, such as employment, was an important contributor to poor mental health once a person acquired a disability [9].

3) After obtaining employment, a person with disability may be differentially selected out of work

There is considerable evidence to suggest that people with disabilities are more likely to become unemployed than those without disabilities [7]. Health factors are likely to be related to early retirement and unemployment among workers with disabilities [42], However, environmental factors also play a role. A poor psychosocial environment (e.g., the fact that people with disabilities are disproportionately exposed to poor quality work) has been found to be an important predictor of exit from work due to disability [43 44]. The factors explaining selection out of work may be related to psychosocial job quality (e.g., occupation, industry etc.,) and discrimination, as well as the lack of availability of supports to stay in employment, such as family and co-

worker encouragement and workplace adaptation. In addition, it is necessary to highlight the role of the wider economic environment on employment for people with a disability. Research suggests that during the 2007-09 recession, people with a disability lost work at a greater rate than those without disabilities [45].

This selection out of work is likely to flow through to negative mental health effects with evidence suggesting that this may actually be more profound for people with disability. An Australian study [46] documented greater within-person declines in mental health among persons with disabilities who become unemployed than those persons without disabilities. As noted by Kerr et al [47], there is likely to be a cyclical process that occurs when people with disabilities experience unemployment; this unemployment often leads to chronic stress which in turn leads to negative mental health, and this creates further barriers to employment—potentially ending in exclusion from the labour market (as portrayed in Figure 1).

Discussion

This commentary discusses the concept of disabling working environments, which describes the process of differential selection into work, exposure to poor quality working environments, and differential selection out of work, all of which have potentially harmful effects on the mental health of people with disabilities. It also recognises that these three processes are likely to be cyclical across the life course.

As this paper reveals, some research relevant to this concept has focused on return to work. We find that there have been very few studies focusing on the relationship

between psychosocial job stressors and the mental health of workers with disabilities, or on the effects of transitioning to unemployment or dropping out of the labour market. These findings highlight important gaps in knowledge about the relationship between work and the mental health of people with disabilities.

As identified in the introduction and shown in Figure 1, there are multiple explanations for why people with disabilities are less likely to be in paid work than those people without disabilities. These include factors related to job placement agencies, employers, and the work-context (e.g., stigma and discrimination, lack of workplace accommodations, poor quality work), as well as those occurring outside the workplace including lack of access to quality housing and transport, low education, and poverty [35 38], reflecting the definition of disability as society's response to impairment in all aspects of life. A further complexity is that the causes of low employment are likely to vary by age, gender, ethnicity, area of residence (e.g., metropolitan versus regional/remote), and socio-economic status. There will also be differences depending on the severity, type and whether or not a disability is life-long or acquired as an adult. For example, young people with lifelong intellectual disability may have trouble getting into the labour market, while older people who acquire a psychosocial disability may struggle to stay in employment. The lack of research about the role of employment in predicting mental health outcomes among young people with disabilities entering the workforce is problematic, considering that at a general population level, employment is a key determinant of mental health among young people [48]. It is also important to highlight possible variation in the experience of employment depending on functioning (e.g., mentally, physically, etc.,), possible limitations to activities and participation, and physical structural aspects of a person's

body. Thus, it is necessary to consider both domains of disability as well as specific impairment when considering the concept of disabling working environments.

There is good evidence that obtaining employment is associated with improvements in mental health [15]. At the same time, there is also evidence that the psychosocial characteristics of work are a critical determinant of mental health [16]. However, the range of policies and programs aiming to increase employment levels among people with disabilities across OECD countries [7] may further benefit from considering what is sustainable employment for people with disabilities. A recent review by Ellenkamp et al [37] on employment experiences among persons with intellectual disabilities highlights the importance of lowering demands while at the same time increasing supervisor and collegial support as a means to achieve better work outcomes. This offers a clue as to the work-related psychosocial characteristics that may be associated with better outcomes for people with disabilities. Further investigation of what can be considered as decent and sustainable work may be a critical step in increasing the number of people with disabilities who are in employment.

In terms of limitations, we would argue that there is a need for systematic review of the mental health impacts of disabling working environments. Our review to date is narrative; there is clearly a need for more systematic attention to the ways in which disabling working environments influence mental health and other health conditions. We also acknowledge that this commentary focused on mental health as a key health outcome (based on the justification that this is particularly sensitive to changes in employment and has a significant impact on re-employment). However, it is also likely that disabling working environments impact on other health outcomes. We

would encourage future research on this. At the same time, there is a need for life-course research on the concept of disabling working environments to understand if there are certain critical points where the health and employment prospects of people with disabilities are most sensitive. Qualitative studies are also important in further understanding the experience of people with disabilities as they engage in the labour market, as well as for understanding what is meant by meaningful and sustainable work.

In conclusion, this paper has described the concept of disabling working environments as modifiable contributors to the low employment rates among people with disabilities. We argue that differential selection into work, exposure to poor psychosocial working environments, and differential selection out of work are likely to lead to poorer mental health among people with disabilities. Disabling working environments are likely to exert an effect from a young age and have ongoing consequences throughout a person's life. We would recommend more research on the lifelong consequence of exposure to poor quality work and exclusion from employment on the mental health of people with disabilities. We also recommend that employment policies address all aspects of this pathway, rather than simply aiming to get people with disability who are not employed into work. Failure to do this will risk perpetuating a continuous cyclical pathway from selection into poor quality jobs to selection out of work. This information is critical to the development of future policies and programs to promote meaningful and sustainable work for people with disability.

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