Original Research

Moving Beyond Access: Barriers to Meaningfully Inclusive Affordable Housing for Disabled People

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Abstract

Background: Affordable housing in Calgary, Canada contributes approximately 16,700 of the city's rental units. Despite a sizable proportion of disabled persons living in these housing units, there is little research on the experiences of disabled persons and the impacts and implications of affordable housing on their hopes, dreams and perceived future pathways. Furthermore, there is a limited analysis examining what "meaningful inclusion" in affordable housing actually entails. **Methods:** We conducted a cross-sectional survey (n=158) with residents of affordable housing in Calgary, Canada. **Results:** Two-thirds of tenants are living with disability in their household; however, current approaches to affordable housing are grounded in rhetoric about inclusion but not full acknowledgement or responsiveness to what meaningful inclusion is. Disabled people reported improvement in hope, happiness, feelings of belonging and self-esteem, but limited improvements in stress levels, experiences of discrimination, employment and physical health. **Conclusions:** The authors conclude that while access to affordable housing is helpful in terms of improving certain life domains, it is not a panacea. Many disabled people still face structural barriers and affordable housing, must be developed with a fulsome understanding of community inclusion and be trauma-informed, in addition to providing bricks and mortar, if we are to move beyond mere access.

Keywords: Affordable housing; Disabled people

Introduction

Affordable Housing (AH) in Canada is a vital component of the country's housing continuum and typically refers to housing, including rent or mortgage, utilities and taxes that cost less than 30% of a household's before-tax income. AH can include private, public, and non-profit sector housing namely, rental, ownership, co-operative, temporary, and permanent housing. According to the Canada Mortgage and Housing Corporation [1], housing is considered affordable if the cost does not limit individual or family capacity to pay for other needs such as food, clothing, education and transportation. This definition applies to all Canadians, as it is a ratio of a household's shelter costs compared to their income (CMHC) [1]. According to the 2018 Canadian Housing Survey (CHS), a biennial survey conducted by the CMHC and Statistics Canada, there are approximately 628,700 Canadian households that reported living in social and affordable housing.

In Canada in 2018, about one in six renters in affordable housing (AH) reported having a long-term illness or disabling condition during the last 12 months [2] and the results of the 2018 CHS survey showed that 18.5% of affordable rental households needed accessibility adaptations (e.g. widened doorways or levered door handles) because a member of the household had a physical or mental disability diagnosis. In

contrast, only 6.2% of renters not living in AH reported needing accessibility accommodations. Households that do require accessibility adaptations had a higher rate of core housing need than those households without. Core housing need is defined as "living in an unsuitable, inadequate or unaffordable dwelling, and not able to afford alternative housing in their community" [3]. These households were also more likely to fall under the housing affordability standards.

In Calgary, Alberta, Canada, a city with over 400,000 total private dwellings, approximately 16,000, or 4% of them meet affordability definitions [4]. Calgary currently adopts the national income cutoffs for AH programs. The affordability standards determine the income level required to afford average rent for a two-bedroom apartment in the city and currently stands at an annual income level of $53,000.00 CAD. This is far beyond the reach of many disabled people and whose main source of income is publicly administered income support programs like the Alberta Assured Income for the Severely Handicapped (AISH) Program. In a report delivered by the Government of Alberta [5], they indicated that Calgary had the second highest proportion of AISH recipients in Alberta (n=20, 575 AISH recipients; 29.4%). As of May 2021, the maximum living allowance for AISH recipients is $1685 per month or $20,220 annually. The purpose of AH, according to the City of Calgary website is to "provide access to safe and stable housing that helps create

inclusive communities and makes our city a great place to live and work for citizens of all income levels" [6], although no definition of inclusive communities is included.

Language around disability is complicated and political. There is not a universally acceptable term to describe disability among advocates and lived experience experts. People first language (PFL) emphasizes that we are all people first and language like people or persons with a disability is meant to focus on individuality, equality and dignity rather than on a diagnosis [7]. Identity first language (IFL) like disabled person, places the disability first and acknowledges that disability is intertwined with identity [8]. Advocates argue that choosing the 'right' language should be done by the people you are talking with [9] in this study we heard from 93 participants with diverse experiences. Given there would likely not be universal consensus on the terms, we take up IFL in agreement with Titchkosky's [10] critique of PFL. Titchkosky [10] argues that PFL and its use in formal Canadian policy documents perpetuate disability stigma rather than reducing it. This author further argues, PFL continues to represent disability in reductive and fixed ways by ignoring consideration of what might further define an individual. Her critique draws reference to language that represents more socially accepted personal attributes, like race, sexual orientation, gender identification and religion, which can take a primary position in our identity labels (BIPOC woman, Muslim man, same sex couple, transgendered person). Titchkosky further notes that use of PFL implies that a disabled person's humanity remains in question as it still suggests nondisabled people need reminding that people with disabilities are indeed people, first. In this paper we use the language of disabled person or in our comparative analysis, people living with disability (PLWD) to acknowledge that disability is a label that is intertwined with identity.

This quantitative study surveyed tenants in affordable housing units in Calgary, Canada, to understand their experiences including how 'disability' affected their trajectories into AH housing and the outcomes of affordable housing for themselves and their families.

Background

Access

The limited Canadian literature that examines disability and AH focuses on access to affordable housing and not the experiences of the people living within the units. For instance, Owen and Watters, in their qualitative study in Winnipeg, Manitoba highlighted the shortage of accessible and affordable housing [11]. Nelson [12], similarly reports the enduring challenge of the provision of care for individuals living with psychiatric disabilities. Gibson et al. [13], consider what constitutes an adequate home environment for adults living with mobility differences. While much of this research serves to inform policy and planning, the experiences of disabled people in AH housing is underrepresented and must be considered when making decisions about the future of housing policy and service delivery because disabled people are historically and persistently overrepresented in their experiences of health, social and economic inequities.

Structural inequities

In Canada, 23% of disabled people are considered low income compared with 9% of those who are not disabled. Low-income rates also vary by disability 'type', meaning that people living with developmental or cognitive differences experience higher rates of income poverty than people with a physical or sensory differences. For people with both diagnoses, the low-income rate is as high as 35% [14].

Access to employment, including stable employment with liveable wages and benefits is also a persistent issue for disabled people. While in both Canada and internationally, there is legislation to protect the rights of disabled people and prevent discriminatory practices, among working age adults, disabled people are less likely to be employed (59%) than those who are not (80%) [15]. *The U.N. Convention on the Rights of Persons with Disabilities* (UNCRPD, 2006), and the *Canadian Human Rights Act* (R.S.C., 1985) prohibit discrimination based on physical or mental disability and require employers provide a 'duty to accommodate'. The Employment Equity Act (SC, 1995, c.44) encourages employers to remove barriers to employment and work towards equity by creating job opportunities for disabled people [16].

Particularly troubling, is that disabled people are twice as likely as non-disabled people to experience violence and abuse [17,18]. This includes high rates of physical and sexual violence, often starting in childhood and persisting across the lifespan and within multiple relationships [19]. This issue has persisted for several decades, with some arguing that the primary reason for this historical trauma, is because disabled people continue to be socially excluded and segregated from participation in community life. This occurs primarily through attitudes and perceptions that influence policy development that does not acknowledge or recognize disabled people as valued or important members of society [20]. While the language of inclusion may appear in policy documents, inclusion is not well articulated and rarely defined beyond concepts such as accessibility or duty to accommodate. A fulsome understanding of inclusion, and how we understand it in this study, is: being accepted (and valued) as a person beyond the disability label, having personal relationships with family and friends, access and involvement in leisure and recreation activities, formal and informal supports and appropriate and safe housing [21].

We support the conclusions of other researchers that perceptions of disability play a larger role in the persistent exclusion of people with disabilities than do the lack of accommodation and anti-discrimination polices [22]. We also support the arguments of disability theorists in that there are significant limitations in the scholarly knowledge and discourse specific to structural barriers and disability. Looking to these structural barriers, we see disabled people systemically "trapped" in poverty, unemployment and violence. We further argue that dominant approaches to examining and finding solutions to these persistent issues are largely grounded in medical/psycho-social models that problematize the interpersonal and individual experiences as the predictors of inequity and exclusion. In other words, to 'fix' issues for disabled people, we need to fix 'them'. The primary issue with these approaches is that they cannot

account for the broader structural barriers facing disabled people, in particular, the social, political and cultural constructions of disability and their intersections with persistent inequities [23].

In this study we take a critical social theory approach, notably, a critical disability studies lens to examine the experiences of disabled people living in affordable housing units in Calgary, Canada. This approach allows a critical discussion of the impact of values, ideologies and beliefs about disability that, we identify as at the root of long-standing exclusionary practices. We argue instead that we must take up an understanding of inclusion as described above, which necessitates a shift away from mere access and recognizes and acknowledges that structural barriers must be eliminated.

Methods

Critical disability theory

Critical Disability Studies (CDS) interrogates the power imbalances, devaluing social realities and experiences of marginalization felt by disabled people. There are many ways to take up CDS, for the purpose of this paper we focus on the medical model and ableism and highlight the complements and contradictions among these understandings. The primary purpose is to argue for an alternate understanding of disability that challenges individual understandings of poverty, employment and violence and shifts our focus to structural barriers currently informed by hegemonic interpretations.

Central to the majority of service delivery approaches, is the medical model [24,25]. In this approach, a disabling condition exists solely within the individual, as their tragic misfortune, disease, or 'sickness'. It is seen as an internal problem requiring professional or medical interventions to establish, or re-establish that individual's personal potential or worth. Garland-Thomson's [26] writings focus on critical theory that views the cultural influences that delineate ability from disability as a "system of exclusions" (p.1557) that privilege certain representations of beauty, health, fitness and intellect, over others. These representations are the measure to which health and wellness are seen in Western culture and what drives institutionalized western medicine and service delivery. The implications in this privileging of certain ways that bodies look and function over others is that disability, becomes politicized when power and ideology sustain social hierarchies, where certain individuals are deemed worthy of full citizenship, human rights, dignity and respect, and others are not. The medical model projects a kind of dualism that interprets the able bodied as somehow better or superior. Any degree of success (or failure) is rarely directed at the quality of professional care or intervention. Rather, it becomes a value laden reflection of the motivation of the person to get better and become 'more normal'. This judgmental gaze is often directed at those who are dependent on social systems of support [26] including, we argue, affordable housing.

The social model, proposed by Oliver [27], was a reaction to the limitations of the medical model. Oliver distinguished constructs of impairment and disability by conceptualizing disability in a way that redirects the 'location' of a problem towards the social systems and structures that exclude people from fully participating. Oliver's Social Model was meant to re-cast impairment as a facet of body diversity and separates it from the exclusionary and devaluing social practices that limit the person from full participation. Goering [25] draws reference to the barriers found in general societal attitudes and reduced expectations of disabled people, most significantly, ironically, within human service professions. Goering further argues that it is exceptionally more difficult to deal with devaluing attitudes and beliefs than it is to live with the physical limitations of an impairment. While issues brought to light by the Social Model are still relevant, particularly within the realm of service delivery, many disability scholars have advanced these frameworks with a focus on hegemonic understandings that frame disability within a discourse that equates human worth with potential and contribution. When the 'value' of a person is inherently linked to how or what someone might achieve, such views set a precedent for social ableism. Ableism therefore, like other 'isms', (e.g., racism, sexism, ageism) asserts a particular social privilege [28]. In other words, the ways a human body might look or function serves as a determination of the level of benefit or burden that body places on health, public and social systems. Although there are a myriad of ways ableist positions emerge (e.g. language, institutional structures, media, policy) the perceived sense of the tragedy of being disabled and/or the burden on systems of support leads to a de-valuing or dismissing of disabled people. Taking up an examination of the medical model and how it contrasts with ableism is appropriate in this study as our analysis can prioritize structural barriers rather than a continued preoccupation and reiteration of individual issues. Or, can help us challenge the social structures, policies and the values that underlie them [29].

Measurement

The current study is a small descriptive quantitative study. Disability was self-reported, with participants being asked if they or a member of their household identified as disabled. If the participant indicated that they or a member of their household was disabled, they were asked what type(s) they had: learning, cognitive, mobility-related, physical health issue, and/or mental health issue. Physical health issues were further categorized by type, including: mobility, chronic disease, pain, or injury. Mental health issues were also sub-categorized and included: depression, anxiety, substance use issue, dementia, schizophrenia, bipolar disorder, eating disorder, borderline personality disorder, post-traumatic stress disorder, or agoraphobia. Participants could select as many categories as they required, but were coded as disabled if they responded yes to at least one. The purpose of having people identify specific diagnoses/labels was not to do a comparative analysis of the similarities and differences between them, rather to highlight the myriad of diagnoses that people are living with, showing some of the many complexities that must be addressed when discussing the implications.

Data collection

Individuals were eligible to participate if they were over the age of 18 years, the legal age of majority in Alberta,

Canada. The participants must have lived in an affordable housing unit for the last six months or more and were able to respond to the survey in English. The surveys were designed in collaboration with a Community Advisory Committee (CAC) which was made up of service providers, researchers from housing initiatives, and policy makers in Alberta. This was to ensure relevant questions were asked throughout the survey and to facilitate data collection. This group helped to build the survey items, decide on appropriate wording and categorization, and to provide insight into the interpretation of results. The surveys included demographic, trajectory, and experiential questions. The survey also had a space for participants to provide feedback on their affordable housing experience.

The research team used posters at affordable housing sites and asked property managers to help distribute study information to recruit participants. Participants were invited to complete the questionnaires online or in-person. Members of the research team visited several housing sites by attending community hosted events or activities. Anyone interested in becoming a participant was offered information about the study and taken through the informed consent process, which informed them that their participation was voluntary and would not affect their service delivery, that the site manager or housing provider would be unaware of their participation, and that all results would be anonymized and reported in aggregate to protect their privacy and confidentiality. All respondents received a $20.00 gift card to thank them for their time. Ethics approval for this project was received from the University of Calgary's Conjoint Health Research Ethics Board (Ethics ID).

Analysis

All variables were cleaned and coded based on self-reported information from the surveys using software called STATA 12. All qualitative responses were themed and recoded into numeric responses for analysis purposes. Because of the small sample size, data analysis was descriptive, calculating the number of responses and the 95% confidence intervals for each question. Some variables were categorized or dichotomized because of small sample size and to allow for meaningful description of the data. To determine if there were between group differences, we conducted chi-square tests; the research team determined that statistically significant variations were present if the probability level was less than 0.05.

Results

Overall, we collected data from 158 participants, 93 (62.0%; 95% CI: 53.9-69.5%) of whom self-identified as living with disability within their household (either the respondent or a member of their household) (Table 1).

		Total Participants	Disability N (Proportion, 95%CI)	No Disability N (Proportion, 95%CI)	Significance Level
Total number of participants		158	93 (62.0%, 53.9-69.5%)	57 (38.0%, 30.5-46.1%)	-
Gender	**Male**	22 (14.8%, 9.9-21.5%)	18 (19.6%, 12.6-29.0%)	4 (7.0%, 2.6-17.4%)	P=0.036
	Female	127 (85.2%, 78.5-90.1%)	74 (80.4%, 71.0-87.4%)	53 (93.0%, 82.6-97.4%)	
Age	**18-34 years**	51 (34.7%, 27.4-42.8%)	23 (25.6%, 17.6-35.6%)	28 (49.1%, 36.4-62.0%)	P=0.007
	35-49 years	64 (43.5%, 35.7-51.7%)	42 (46.7%, 36.6-57.1%)	22 38.6% (26.9-51.8%)	
	50+ years	32 (21.8%, 15.8-29.2%)	25 (27.8%, 19.5-38.0%)	7 (12.3% (5.9-23.7%)	
Education	**Some Secondary School**	38 (27.9%, 21.0-36.1%)	22 (25.3%, 17.2-35.5%)	16 (32.7%, 21.0-47.0%)	P=0.581
	High School Graduate	35 (25.7%, 19.0-33.8%)	23 (26.4%, 18.2-36.8%)	12 (24.5%, 14.4-38.5%)	
	Some College/ University	30 (22.1%, 15.8-29.9%)	22 (25.3%, 17.2-35.5%)	8 (16.3%, 8.3-29.5%)	
	College or University Graduate	33 (24.3%, 17.7-32.2%)	20 (23.0%, 15.3-33.1%)	13 (26.5%, 16.0-40.6%)	
Household Income	**Less than $25,000 per year**	114 (79.7%, 72.3-85.6%)	75 (83.3%, 74.1-89.7%)	39 (73.6%, 60.1-83.8%)	P=0.161
	More than $25,000 per year	29 (20.3%, 14.4-27.7%)	15 (16.7%, 10.3-25.9%)	14 (26.4%, 16.2-39.9%)	
Income Source	**Assured Income for the Severely Handicapped (AISH)**	29 (19.3%, 13.7-26.5%)	26 (28.0%, 19.7-38.0%)	3 (5.3%, 1.7-15.2%)	0.001
	Alberta Works	55 (36.7%, 29.3-44.7%)	38 (40.9%, 31.3-51.2%)	17 (29.8%, 19.3-43.0%)	0.173
	Employment (full- or part-time)	44 (29.3%, 22.6-37.2%)	18 (19.4%, 12.5-28.7%)	26 (45.6%, 33.2-58.7%)	0.001
Marital Status	**Single, Divorced, or Widowed**	89 (61.8%, 53.6-69.4%)	55 (61.1%, 50.6-70.7%)	34 (63.0%, 49.3-74.5%)	0.825
	Married, Partnered, or Common-Law	55 (38.2%, 30.6-46.4%)	35 (38.9%, 29.3-49.4%)	20 (37.0%, 25.2-50.7%)	
Ethnicity	**African or African American**	24 (18.2%, 12.4-25.8%)	13 (15.1%, 8.9-24.4%)	11 (23.9%, 13.7-38.4%)	P=0.024
	Asian	12 (9.1%, 5.2-15.4%)	6 (7.0%, 3.1-14.8%)	6 (13.0%, 5.9-26.3%)	
	Caucasian	64 (48.5%, 40.0-57.1%)	51 (59.3%, 48.6-69.2%)	13 (28.3%, 17.1-43.0%)	
	Indigenous	13 (9.8% (5.8-16.3%)	6 (7.0%, 3.1-14.8%)	7 (15.2%, 7.4-28.8%)	
	Middle Eastern	15 (11.4%, 6.9-18.1%)	7 (8.1%, 3.9-16.2%)	8 (17.4%, 8.9-31.2%)	
	Other	4 (3.0%, 1.1-7.9%)	N<5	N<5	

*based on self-reported data, numbers may not add up to 100% due to missing data or non-response

Table 1: Demographic characteristics.

People in the 'disabled group' were significantly older than the non-disabled group (p=0.032), were more likely to receive income from Assured Income for the Severely Handicapped (AISH), less likely to receive income from employment (p=0.001), and were more likely to be Caucasian (p=0.024). The distribution of self-reported educational achievement, household income, and marital status were not significantly different between the two groups.

Table 2 notes the varying 'types' of disability experienced by the members of our sample. Physical and mental health issues were the highest reported. Almost half of the participants reported a physical health issue (47.9%, 95%CI: 39.8-56.1%) and 40.1% (95%CI: 32.3-48.5%) reported having a mental health issue. Of those who reported having a mental health condition in their household, the most commonly reported were anxiety (77.2%) and depression (81.4%), with 15.8% indicating that a member of their household had a substance use issue and 19.3% indicating that a member of their household had bipolar disorder. For those reporting a physical health condition in their household, 41.4% (95% CI: 30.4-53.4%) reported a chronic disease, 30.4% (95%CI: 20.6-42.4%) reported a mobility issue, and 55.7% (95%CI: 43.8-67.0%) reported having pain. 'Disability' was seen to have significant impact on the household, with 40.7% of those with a mental health issue and 39.7% with a physical health issue saying it had a significant impact. Participants reported several barriers to getting supports, including limited income for necessary medications, language barriers, mobility, and lack of transportation.

		Disability
Type of 'Disability'	**Cognitive**	9 (6.0%, 3.1-11.2%)
	Learning	25 (16.7%, 11.5-23.6%)
	Mobility	18 (12.0%, 7.7-18.3%)
	Physical Health	69 (47.9%, 39.8-56.1%)
	Mental Health	57 (40.1%, 32.3-48.5%)
Type of Mental Health Issue	**Addiction**	9 (15.8%, 8.3-28.0%)
	Anxiety	44 (77.2%, 62.3-86.4%)
	Bipolar Disorder	11 (19.3%, 10.9-31.9%)
	Depression	46 (81.4%, 69.1-89.5%)
	Eating Disorder	5 (8.8%, 3.6-19.7%)
	Other (Schizophrenia, PTSD, Dementia, Borderline Personality Disorder, Agoraphobia)	11 (19.3%, 10.9-31.9%)
Type of Physical Health Issue	**Chronic Disease**	29 (41.4%, 30.4-53.4%)
	Injury	3 (4.3%, 1.4-12.9%)
	Mobility Issue	21 (30.4%, 20.6-42.4%)
	Pain	39 (55.7%, 43.8-67.0%)
Impact of Mental Health Issue on Household	**No impact**	5 (8.5%, 3.5-19.1%)
	Some impact	30 (50.8%, 38.1-63.5%)
	Significant impact	24 (40.7%, 28.7-53.8%)
Impact of Physical Health Issue on Household	**No impact**	2 (2.9%, 0.7-11.3%)
	Some impact	39 (57.4%, 45.2-68.7%)
	Significant impact	27 (39.7%, 28.7-51.9%)
Barriers to Supports for Mental Health Issue	**Limited income for medication**	11 (19.3%, 10.9-31.9%)
	Language barrier	4 (7.0%, 2.6-17.6%)
	Mobility	11 (19.0%, 10.7-31.4%)
	No provider in my area	6 (10.3%, 4.6-21.5%)
	Lack of transportation	9 (15.8%, 8.3-28.0%)
Barriers to Supports for Physical Health Issue	**Limited income for medication**	20 (28.6%, 19.1-40.4%)
	Language barrier	6 (8.7%, 3.9-18.3%)
	Mobility	18 (26.1%, 17.0-37.9%)
	Lack of transportation	12 (17.1%, 9.9-28.0%)

Table 2: Characteristics of disability for affordable housing tenants.

Table 3 denotes employment by disability 'status'. People living with disability (PLWD) in their household were significantly less likely to be employed, with only 5.4% having full-time and 14.0% having part-time employment. These households were also significantly more likely to report that they were unable to work (53.3% *vs.* 13.0%), with illness or being disabled as the most commonly reported barrier to employment. Table 4 indicates trajectories into AH and the housing history of participants. There was no significant difference in the type of housing participants lived in before moving to their current AH unit. However, PLWD were significantly more likely to report that poor health was the main reason for moving into AH (p=0.008). These households were also more likely to report ever having experienced homelessness (p=0.011).

Experiences in housing

Participants reported varying access to services within their neighbourhood (Figure 1).

		Disability	No Disability	Significance
Employed	**Any employment**	13 (13.5%, 8.0-22.0%)	26 (44.1%, 31.9-56.9%)	P<0.0001
	Full-time employment	5 (5.2%, 2.1-11.9%)	7 (10.9%, 5.3-21.3%)	P=0.172
	Part-time employment	13 (13.4%, 7.9-21.8%)	25 (39.1%, 27.9-51.5%)	P<0.0001
Ability to Work	**Unable to work**	47 (50.5%, 40.4-60.6%)	10 (16.7%, 9.2-28.4%)	P<0.0001
	Able to work but unemployed	35 (37.6%, 28.3-47.9%)	22 (36.7%, 25.4-49.6%)	
	Able to work and employed	11 (11.8%, 6.6-20.2%)	28 (46.7%, 34.4-59.3%)	
Barriers to Employment	**Cannot find a job**	25 (25.8%, 18.0-35.4%)	19 (29.7%, 19.7-42.0%)	P=0.585
	Cannot find childcare	19 (19.6%, 12.8-28.8%)	16 (25.0%, 15.9-37.1%)	P=0.415
	Ill or disabled	35 (36.1%, 27.1-46.2%)	2 (3.1%, 0.8-11.8%)	P<0.0001
	Language issues	4 (4.1%, 1.5-10.5%)	4 (6.3%, 2.3-15.6%)	P=0.543
	Worried about making too much money (not qualifying for low-income housing)	7 (7.2%, 3.5-14.4%)	1 (1.6%, 0.2-10.4%)	P=0.106

Table 3: Employment by disability status.

		Disability	No Disability	Significance
Type of Housing before Moving into Current AH Unit	**Homeless**	28 (29.8%, 21.4-39.8%)	16 (29.1%, 18.6-42.4%)	P=0.396
	Another AH Building	14 (14.9%, 9.0-23.7%)	5 (9.1%, 3.8-20.2%)	
	With Family	20 (21.3%, 14.1-30.8%)	18 (32.7%, 21.6-46.2%)	
	Renting or Owned Market Housing	32 (34.0%, 25.1-44.2%)	16 (29.1%, 18.6-42.4%)	
Main Reason for Moving into Affordable Housing	**Domestic Violence**	10 (10.3%, 5.6-18.2%)	10 (15.6%, 8.6-26.8%)	P=0.317
	Lost Job	14 (14.4%, 8.7-23.0%)	7 (10.9%, 5.3-21.3%)	P=0.519
	Could not afford market housing	65 (67.0%, 57.0-75.7%)	39 (60.9%, 48.5-72.1%)	P=0.430
	Poor Health	18 (18.6%, 12.0-27.6%)	1 (1.6%, 0.2-10.4%)	P=0.001
Ever Experienced Homelessness		39 (41.9%, 32.3-52.2%)	12 (20.7%, 12.1-33.1%)	P=0.007
Has extended family who live in affordable housing		22 (23.9%, 16.2-33.8%)	5 (10.2%, 4.3-22.4%)	P=0.049
Lived in affordable housing as a child		13 (14.6%, 8.6-23.6%)	5 (9.6%, 4.0-21.2%)	P=0.391

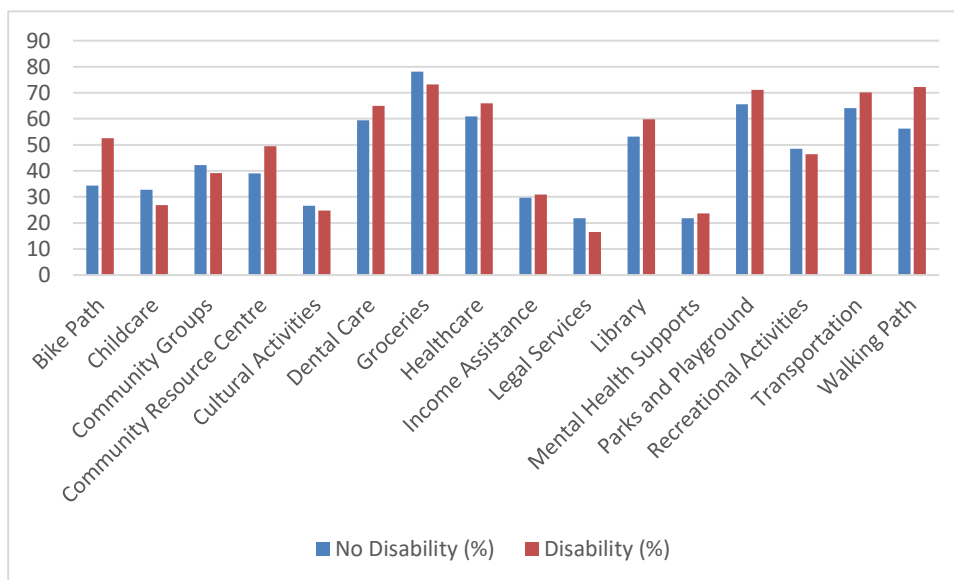**Table 4:** Trajectories into Housing.

Figure 1: Access to services within neighborhood.

Figure 1 shows that barriers to services existed for all tenants, including childcare, cultural activities, income assistance, legal supports and mental health supports. Significant differences between the groups were seen in access to the bike path and walking paths (p=0.023 and 0.037, respectively).

Figure 2 shows that overall, 88.7% (80.6-93.6%) of PLWD and 78.1% (66.3-86.6%) of those not, said they had experienced positive change in at least one domain since moving into AH (p=0.071). Of note, PLWD were less likely to report improvements regarding discrimination, employment and physical health than those without (p=0.014; p=0.004).
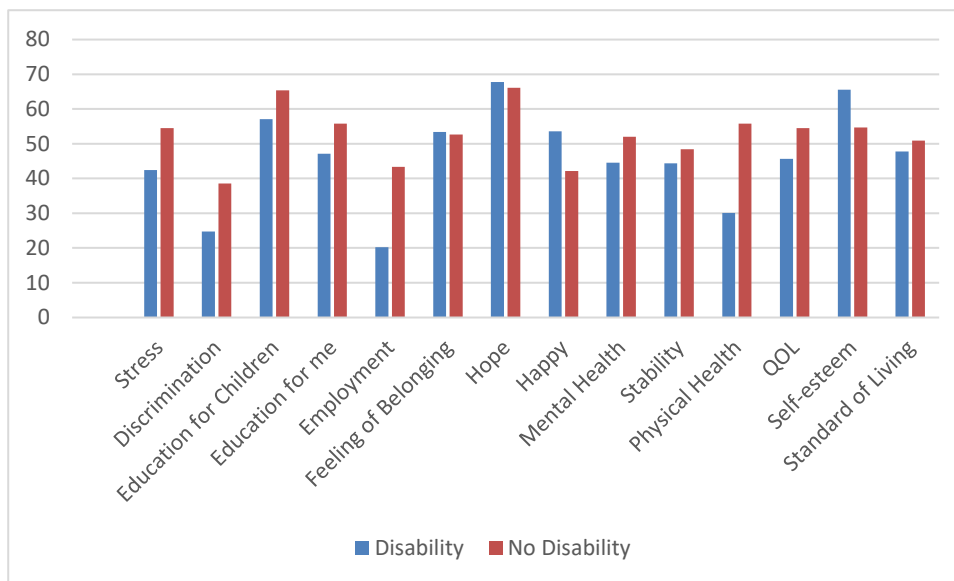
Figure 2: Improvements since moving into affordable housing.

Domestic violence

Overall, 39.1% of PLWD and 29.6% of those without reported having experienced domestic violence (p=0.254). For women living with disability, 43.5% had experienced domestic violence (95% CI: 32.2-55.4%) compared to 31.4% of those without (95% CI: 20.1-45.4%) (p=0.178). Overall, 38.3% of women (95% CI: 30.0-47.4%) and 19.0% of men (95% CI: 7.3-41.3%) reported having experienced domestic violence (p=0.088).

Expectations moving forward

Table five shows 'close to' significant differences regarding the length of time that participants had spent in their current housing. That is, approximately 9% of PLWD had lived in their housing unit for less than one year compared with 10.5% of those without. However, 50.5% of participants living with and 38.6% of participants living without had lived in their affordable housing unit for five years or more. There was a significant difference between the expectations for housing over the next two years, PLWD were significantly more likely to indicate that they expected to still live in AH in two years than those without (p=0.030).

Discussion

The current Canadian literature reporting on the experiences of disabled persons who live in affordable housing is limited [11,13,30]. The current study aimed to add to the scholarly literature in this area by asking 158 survey respondents living in AH units if they presently live with a physical, mental mobility, learning and/or cognitive disability label and what their experiences were regarding their housing situation. In the current sample, 62% of respondents (n=93) reported living with disability, primarily physical and mental health issues. This is notable since disability prevalence rates show that about 22% of Canadians report being disabled, including those with mental health issues [31]. Our findings

corroborate other work previously done in this area arguing that disabled people are often low income, experience barriers to employment and are at high risk for experiencing violence, particularly for women.

Over half of our participants reported a physical health issue and 40% experience mental health concerns. It remains to be seen whether this phenomenon reflects a push into affordable housing because of one's impairment, but we know based on our findings that a large majority of the participants (83%) have incomes well below the Canadian Market Based Measure (MBM) in Calgary, Alberta of $49,462 per year [32] suggesting it as a likely possibility. Furthermore, disabled people in this study were less likely to report improvements in employment since moving to affordable housing suggesting that even with the presence of employment accessibility legislation, these barriers persist.

Relatedly, in this study, approximately 78% of PLWD compared with 57% of respondents not, reported that they had an expectation that they would remain in their current housing in two years from the time the survey was taken. This suggests limited belief in a significant change that would enable them to 'move on' or substantively change their living and income situations.

While a large majority of participants shared that they experienced a positive change in at least one life domain (i.e., self-esteem, hope, feelings of belonging and happiness), PLWD, were less likely to report improvements in stress levels, discrimination, education, employment and health than people living without. Many also reported that their current housing had several limitations. These included limited access to 'friendly' outdoor spaces including bicycle and walking paths, local amenities, and services.

Lastly, while we didn't have enough statistical power to comment on the significance of domestic violence, a high proportion of PLWD, reported higher rates compared with residents without. Women living with had even higher proportions of DV experiences. PLWD also reported higher rates of experiences of homelessness. These results tell us that by the time people have accessed AH, they have experienced

multiple traumas that likely intersect and if unresolved, exacerbate the structural barriers they face.

In the absence of a critical disability lens, or by understanding disability as simply a medical 'problem' we perpetuate a preoccupation with 'fixing' the disabled person. Solutions would likely revert to requests for additional programing to build employability skills which would in turn increase incomes, reduce dependency on inadequate government financial benefits and improve 'quality of life'. A CDS approach allows us to ask why, despite the presence of accessibility legislation and policies of inclusion, disabled people persistently and consistently experience poverty and trauma from a 'systems' view. In other words, we can question how AH housing policy was designed, in whose interests and with what outcomes in mind. A CDS lens allows us to argue that attitudes and beliefs about disability and limited understandings of inclusion and its importance, are at the root of these persistent issues. In other words, inclusion is in language only and the actual needs of people are not understood as it is not deemed important or of value to do so.

Knowing this, it is pertinent that housing developers and public policy makers consider the needs of their tenants', from their personal experiences, and hopes and dreams for the future and critically reflect on and address attitudinal and structural barriers. Considerations related to increased safety and trauma-informed care should have a role in policy and planning with respect to affordable housing development and operations. Interventions should prioritize building awareness among AH staff and ensuring they have the skills and training needed to provide seamless referrals and to challenge their own attitudes about diversity, equity and inclusion. PLWD reported better outcomes in feelings of hope, happiness, belonging and self-esteem, however, improvements in discrimination, employment and health ranked among the lowest. If we take up a strength-based approach, and return to the discussion of inclusion and what it means, (being accepted (and valued), having personal relationships, access and involvement in leisure and recreation, appropriate and safe housing, formal and informal supports [21], we can argue that the only 'piece' in place currently is access to housing. If the primary purpose of AH was to build inclusive communities as stated earlier, then a reimagining of the purpose of AH would necessitate interventions that build acceptance and value of people, relationships and social supports and low barrier access to leisure and recreation. Building spaces to facilitate better inclusivity could lead to better understandings and responses to the structural issues at the root of discrimination (for example) and could help us begin to dismantle or disrupt entrenched ideologies about what 'disability' is and who the 'disabled' are.

Limitations and Future Research

This study has limitations that need to be considered when interpreting the results. First, the sample size is small given the population of persons living in affordable housing in Calgary, Canada. The small sample size may limit this study's representativeness of the larger affordable housing environment and our ability to detect statistically significant differences between groups. However, even our small pilot study showed some significant differences in the housing experiences of the PLWD group, highlighting the need for future research in this area. Second, there was also a disproportionate number of female respondents and no representation from non-binary members of the affordable housing community. This limits the interpretation of this research regarding the intersection of gender diversity and disability. Future research should embed the need for diverse representation, including intersections of gender diversity, ethnicity, and disability.

Limitations with self-reported data include participant bias and differences in interpretation of the meaning of the questions. There may also have been literacy differences. While the research team did meet in person with several participants, several also participated though the online option. There is a need for qualitative research to complement existing quantitative knowledge to better understand the nuances and unique experiences of people with diverse needs and experiences. Including a focus on race and culture and the ways in which these identities intersect with gender should be a primary focus of future studies. Future research could also focus more specifically on issues of discrimination and explore the reasons behind some, but limited improvements in stress levels, education, employment and health. While physical and mental health issues emerged more than cognitive or learning disabilities, future research could prioritize recruitment of people living with these diagnoses and how policy changes could better reflect diverse experiences and needs.

Finally, data in this study was collected before the COVID-19 pandemic. Given studies that argue that in times of a public health crisis, poverty, mental health and dependency levels rise [33], a retrospective study of the impact of the global pandemic on both disability and its implications could highlight important health, social and economic inequities that are exacerbated by public health emergencies. Our theoretical approach, while helpful in understanding structural barriers due to ability and ableism limits what we can know about the intersectionality of disability with gender, culture, race, and identity.

A next step for research would be to understand why, from the stories of residents, certain improvements is some life domains happen and seek solutions to further build upon these experiences perhaps by initiating and evaluating peer support groups, sharing circles, and/or opportunities to build social networks with neighbours.

Conclusions

While access to affordable housing is helpful in terms of improving certain life domains, it is not a panacea. Many PLWD still face barriers to meaningful community inclusion. Participants in our study reported higher rates of violence and experiences of homelessness and reported worse outcomes in stress levels, discrimination, education, employment and health than people living without disability. Our participants also reported being less likely to envision a move out of AH suggesting a belief there had limited opportunities for a different future.

While this study helps add to the current but scant literature, there is still much missing in terms of understanding the experiences of residents for the purpose of

building inclusion. Future studies should consider using qualitative research methods to complement findings. Including disabled people in AH program and policy development would shed light on the hopes and dreams of people and their ideas for improved experiences and can help inform next steps for research and for the delivery of inclusive and trauma-informed care in addition to bricks and mortar.

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