Measuring violence against women with disability

Data availability, methodological issues and recommendations for good practice

Introduction

This briefing note, which focuses on the measurement of violence against women with disability, is one in a series of methodological briefing notes for strengthening the measurement and data collection of violence against particular groups of women or specific aspects of violence against women. These briefing notes are meant for researchers, national statistics offices and others involved in data collection on violence against women. They have been developed as part of the UN Women–World Health Organization Joint Programme on strengthening methodologies and measurement of and building national capacities for violence against women data (Joint Programme on Violence against Women Data). These briefing notes seek to contribute to strengthening the quality and availability of data on violence against women and hence enhance global, regional and national level monitoring of progress towards its elimination, including for the United Nations Sustainable Development Goal (SDG) target 5.2 on the elimination of all forms of violence against women and girls.

This briefing note summarizes work undertaken by the World Health Organization (WHO) as part of the Joint Programme on Violence against Women Data to inform the development and strengthening of measures on violence against women disability in violence against women surveys. It provides an overview of the challenges in the availability, measurement and collection of data on violence against women with disabilities. The briefing note also makes recommendations to address some of the issues identified, with the aim of strengthening ongoing and future data collection efforts on violence against women with disabilities and increasing the availability of such data. The inclusion of women with disabilities and the issue of disability within population-based surveys and research on violence against women is necessary for an improved understanding of populations of women at specific risk of violence. This knowledge would also allow more tailored prevention strategies and response/services and programmes to be designed that address the specific needs of women with disabilities.
Background

Discrimination, stigma and misconceptions about disability, as well as restrictive gender and social norms, can increase the exposure of women with disabilities to violence and influence their experience of it (1). Women with disabilities are also subjected and vulnerable to specific forms of violence. A recent systematic review of intimate partner violence against women with disabilities, which included studies that compared the prevalence of intimate partner violence against women with disabilities and women without disabilities, found that women with disabilities reported a higher prevalence of all forms of intimate partner violence than women without disabilities (2). A multinational analysis of data from the European Union showed that disability status was significantly associated with women’s experience of violence in a sample of countries, and that the intersection of women’s disability with low income resulted in higher levels of violence (3). Another systematic review of violence against persons with disabilities identified a pooled prevalence of any recent violence (physical by non-partner, sexual by a non-partner, or intimate partner) of 24.3% (95% confidence interval: 18.3–31.0%) in people with mental health conditions, 6.1% (95% confidence interval: 2.5–11.1%) in those with intellectual impairments and 3.2% (95% confidence interval: 2.5–4.1%) in those with non-specific impairments (4). Most studies included in this latter review were not sex-disaggregated and therefore prevalence figures for women with disabilities were not available in this review (4). A 2012 systematic review and meta-analysis of sexual violence against persons with disabilities found that persons with disabilities were significantly more likely to experience sexual violence than those without disabilities (odds ratio: 2.27, 95% confidence interval: 1.94–2.67%), yet this finding was also not disaggregated by sex (5). Analysis of the association between disability and intimate partner violence from seven violence-prevention programmes in low- and middle-income countries indicated that women with disabilities were nearly twice as likely to report intimate partner violence than women without disabilities (6).

Estimating the population-based prevalence of violence against women with disabilities continues to be challenging given a lack of comparable data on disability and violence against women in surveys and studies on violence against women as well as the lack of measurement of violence in studies on disability among women. Some of these gaps, challenges and recommendations to address these challenges are discussed in this briefing note.

In the context of efforts to improve measurement of violence against women as part of the UN Women–WHO Joint Programme on Violence against Women Data, and the increasing policy, research and programmatic interest in addressing violence against women with disabilities, WHO commissioned a scoping review published in 2022 (7) and held an Expert Meeting on the Measurement of Violence against Women with Disabilities in November 2022 (8) to inform this briefing note and related follow-up work.
Technical basis for recommendations

This briefing note including the recommendations for strengthening the measurement of violence against women and disability were informed by the aforementioned scoping review (7) Expert Meeting (8) and consultations with national, regional and global experts on violence against women, disability and survey measurement of violence against women or persons with disability. To improve understanding of the dynamics, patterns and experiences of violence against women with disabilities, and to address existing gaps in the evidence and data, the scoping review covered: (i) measurement of violence within the context of disability-focused research; (ii) measurement of violence in research focused on the intersection between disability and violence; and (iii) measurement of disability in the context of research focused on violence against women. The review focused on studies using quantitative methodologies to be able to meet the data requirements for the SDGs and strengthen quantitative population-based surveys of violence against women (7).

Review of quantitative and qualitative studies on violence against women with disability

The scoping review aimed to assess the types of measurement and study design used to explore the intersection between violence against women and disability, and to identify strengths and limitations in current approaches to measuring violence against women and disability. Systematic searches in relevant databases identified 174 studies (papers or reports) for inclusion.

A total of 52 studies were conducted in low- or middle-income countries. Most of the studies were cross-sectional surveys and only eight reported results from longitudinal studies. Two types of studies were identified. The first type was studies where all respondents had or self-identified as having a disability. The prevalence of risk factors for or impact of exposure to violence among these participants was assessed. Forty-two of these studies included only women with disabilities, while 22 studies included men and women with disabilities. The second type was studies that included respondents with and without disabilities, and primarily sought to examine the association between disability and violence. In this type, 36 studies included men and women with and without disabilities and 75 studies included only women with and without disabilities.

Physical violence and sexual violence were assessed in the larger proportion of studies and fewer studies assessed psychological violence and economic violence. Description or definition of the forms of violence assessed was not specified in seven studies. While most (113) studies used the gold standard acts-based measures of violence, the level of detail of the instrument used to measure violence varied widely.

Disability-specific types of violence were measured in 11 studies. The most commonly operationalized forms of disability-specific violence included in violence against women instruments were: being prevented from using an assistive device and refusal by an abuser to provide for basic needs required by the woman.

Most studies included physical disability (104) and mental disability (104), with comparatively fewer covering intellectual disability (61) and sensory disability (62). Two papers did not specify the type of disability assessed in the study. Seventy-five studies used measures of functioning limitations (20 of these studies used questions from the Washington Group set), 13 studies used a single-question approach and 67 defined the participants in the research as having a disability based on a diagnosis or self-report of a health condition or impairment.

The scoping review identified several important gaps in the available data and the measurement on violence against women and disability, including: lack of disaggregation of data by sex and disability; few data on the severity and duration of violence against women with disabilities; and limited evidence on the different relationships between type of disability and exposure to violence. In addition, there was limited evidence of adaptation of data collection methods to ensure accessibility of research activities for women with disabilities.
Shortcomings identified in the data and instruments

Data availability and quality

- **Sex disaggregation of disability data.** Existing systematic reviews on violence against persons with disabilities do not adequately shed light on violence against women with disabilities because the results are not disaggregated by sex. Generally due to a lack of disaggregated data in the original studies included (4, 5). Many national disability surveys that include some questions on violence were not included in the scoping review on measurement of disability and violence against women because they did not provide sex disaggregated data on experiences of violence (7). Data from disability services, which could provide additional information, often do not document the forms of violence women who access services are being subjected to.

- **Lack of accessible, inclusive data collection procedures.** Women with disabilities are often excluded from research on violence against women. This can be through inclusion and exclusion criteria (for example, studies that exclude women with cognitive difficulties) and/or lack of adequate training and accommodations to support women with disabilities participating in surveys (for example, most training manuals do not mention any training on disability for enumerators, or provision of accommodations for women with disabilities to participate in the surveys). Deaf women or women who are hard of hearing may be excluded from surveys that are conducted using telephone-based data collection (9). The scoping review found that very few studies included any accommodations of ethical procedures, such as how informed consent or survey instruments were administered to accommodate women with varying types of disability. This results in data on women with disabilities being mainly collected from women who can self-report without any accommodations. Where survey administration does not provide reasonable adjustments, such as accessible format surveys and/ or communication assistance, these survey methods create indirect discrimination and prohibit representative inclusion of persons with disability.

- **Population-based sampling strategy and sample size.** Sampling strategies in national or subnational surveys measuring the prevalence of violence against women are household-based. This excludes women with disabilities who may be living in other settings, such as women who are living in residential care or incarcerated. Sample sizes in national prevalence surveys are often not large enough or sufficiently powered to disaggregate by disability, type of disability, type of violence and other sociodemographic variables. Samples in national prevalence surveys are designed to be representative of the country, and sampling strategy and sample size are not usually designed to be representative of smaller groups in the population. Therefore, population-based surveys likely only capture the tip of the iceberg of the prevalence of violence against women with disabilities and are unlikely to provide a more nuanced picture, such as by type of disability. This is particularly the case in countries with small populations. For example, the 2019 Tonga survey indicated challenges with analysing disability and intimate partner violence given small sample sizes: 333 women reported intimate partner violence, 42 women reported functional disability and 18 women reported experience of intimate partner violence and disability, which made further disaggregation difficult (10).

Despite an overall increase in the availability of data on violence against women with disabilities, more robust measures are needed to provide higher quality data that will, for example, allow tracking of trends over time. Partly as a result of inadequate sampling strategies and sample sizes, data on the prevalence by type of violence (physical, sexual, psychological), type of disability, type of perpetrator, wealth and age are still very limited. We also need more data on the impact of such violence against women with disability and on their experiences when seeking health and other support services, or justice, so we can develop more responsive and effective policies and services.
Measurement of disability

Several different measures of disability are available that have been or can be used in research on violence against women. Table 1 indicates the strengths and weaknesses of three such tools: the Washington Group Short Set on Functioning [WG-SS], the WHO Disability Assessment Schedule [WHO-DAS 2.0] and the Functioning and Disability Disaggregation Tool [FDD11]. The Washington Group Short Set on Functioning has already been used in violence against women national or subnational surveys, whereas the other two, and particularly the WHO-DAS, have been used in smaller studies, as have the WG questions. The FDD11 is a more recent tool and has potential advantages in that it captures impact on functioning.

Table 1: Strengths and weaknesses of three tools for assessing violence against women with disabilities

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| **Washington Group Short Set on Functioning [WG-SS]** | It has six items on difficulties with the following activities: seeing, hearing, walking or climbing steps, remembering or concentrating, washing all over or dressing, and communicating. | ● It captures functioning across body functions and activity domains.  
● It is simple and easy to administer and is short enough to incorporate into a more extensive violence against women survey questionnaire.  
● It is the most widely used disability measure in research on violence against women. Several datasets are available of research on violence against women using this instrument. | ● It does not include several types of disability that may be particularly relevant to consider when assessing the impact of violence against women (for example, chronic pain or psychosocial disability).  
● The questions capture body functions and activities, but not participation domains (for example, difficulty with joining community activities, such as festivities, or religious or other activities because of health problem(s)).  
● It has poor sensitivity for individuals with mild or moderate disabilities, meaning that some proportion of individuals with disability will not be identified using this instrument. |
| **WHO Disability Assessment Schedule [WHO-DAS 2.0]** | Two versions are available:  
● 36-item version which has an average interview time of 20 minutes;  
● 12-item version which is useful for brief assessments of overall functioning in surveys and has an average interview time of 5 minutes. | ● It has excellent psychometric properties.  
● The 12-item version is simple and easy to administer and is short enough to incorporate into a more extensive violence against women survey questionnaire.  
● It has been extensively used and tested in clinical settings. | ● It contains questions on activities and participation domains but not on body functions such as pain or environmental barriers. |
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| Functioning and Disability Disaggregation Tool [FDD11] | It has 11 items on difficulties with the following activities: seeing, hearing, walking or climbing steps, remembering or concentrating, washing all over or dressing, sleeping, performing household tasks, joining community activities, feeling sad, low, worried or anxious, getting along with others, and bodily aches and pain. | - It captures functioning across body functions and activities as well as participation domains.  
- It is simple and easy to administer and is short enough to incorporate into a more extensive violence against women survey questionnaire.  
- It has excellent psychometric properties. |
| WHO Disability Assessment Schedule (WHO-DAS 2.0) | This is a generic instrument for assessing and measuring disability in clinical practice and at a population level. It has a 36-item version and a 12-item version. The 36-item version may be useful in some contexts where researchers are interested in more in-depth questions about violence against women with disability but, similar to the Washington Group Extended Set on Functioning, it is likely to be too long for surveys focused on violence against women. The 12-item version is useful for brief assessments of overall functioning and is short and easy to administer. It has excellent psychometric properties and cultural comparability and is directly linked to the conceptual basis of disability in the International Classification of Functioning, Disability and Health. |
| Functioning and Disability Disaggregation (FDD11) | This tool is based entirely on the Model Disability Survey capacity module and captures functioning across body functions and activities as | addresses many of these weaknesses, however, with 34 items, it is too long to incorporate into surveys focused on violence against women. |

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1. What Works to Prevent Violence against Women and Girls was a research and innovation programme funded by the United Kingdom Department for International Development. It was launched in 2014 and conducted studies, including impact evaluations, in 12 countries.

well as participation domains. It is brief and can be administered quickly and has excellent psychometric properties (15). It measures the prevalence of disability and allows for disaggregation by the level of severity of disability – no disability, mild, moderate and severe disability (15).

Considerations for selection of a tool to measure disability should be based on what the purpose of the assessment is, how the data will be used, and by whom. Measures used should be as inclusive as possible (both in the forms of disability and the forms of disability-specific violence they capture) while also balancing the need for short measures that can be integrated into existing surveys on violence against women or on disability. Selection of a particular disability measurement instrument for violence against women surveys has a significant impact on conclusions about the relationship between disability and violence against women. While the Washington Group questions have been widely used in violence against women surveys, it is important to undertake additional research and comparative analyses to explore other instruments and identify the benefits of other instruments that could advance and strengthen measurement in this field. If questions on violence against women are being integrated into a disability survey, it is important to also ensure adherence to internationally agreed ethics and safety standards for research on violence against women (16). Safety of the woman is paramount in any research and data collection on violence against women.

**Shortcomings related to the measurement of violence**

- **Lack of questions exploring the specific experience of women with disabilities.** The scoping review found that only 6% of studies included measures of acts of violence specific to women with disabilities, for example, denial of care, physical neglect or withholding of medical treatment or assistive devices. One study indicated that the prevalence of violence against women with disability would have been 20% lower if their violence measure had not included disability-specific violence items (17). Lack of inclusion of questions specific to the kinds of violence women with disability are subjected to may result in considerable underestimation of the prevalence of violence against women with disabilities. Research has found that women with disability may experience lifelong denigration and disrespect and may view violence as normal and acceptable, not recognizing some specific experiences as forms of violence (18). Women with certain types of disability may be unable to communicate their experiences, especially in situations where the caregiver is perpetrating the violence and may also be the interpreter or translator. In the case of data collected in the course of service provision, for example, by domestic violence workers, violence may be misidentified in administrative records, that is, destruction of a wheelchair by a perpetrator may be recorded as property damage and the denial of freedom of movement for the woman not recorded.

- **Focus on intimate partner violence.** The scoping review found that more than one third of included studies focused only on intimate partner violence. However, women with disabilities are likely to be at significant risk of violence from other family members, including their children, and from caregivers (paid and/or family members), as well as within institutions, including from co-residents (19). A study indicated that women with disabilities faced increased risk of violence perpetrated by caregivers and decreased risk of violence perpetrated by intimate partners compared to women without disabilities (20). In a study that included a measure of violence specific to women with physical disabilities, disability-related abuse was equally likely to be perpetrated by an intimate partner, a care provider or a health professional (21). The question of whether violence perpetrated by an intimate partner is the most prevalent or pervasive form of violence against women with disabilities needs further exploration. Some evidence indicates that different types of perpetrators may be equally responsible for violence against women with disabilities (21–24). Where specific contexts such as care institutions, or specific perpetrators such as caregivers or assistants (both paid and unpaid) are not included in measurement of violence, such violence may be missed resulting in an under-estimation of the prevalence (25).
**Recommendations for good practice in measurement**

**Recommendations on surveys and survey instrument-related measures**

- Measures of disability should be selected based on the purpose of the research, feasibility of using the measure within the overall methodology of the survey, objectives of the study/survey and plans for data utilization.

- For public use datasets, guidance should be provided on data analysis and utilization for reporting and disaggregation of disability and violence data, including whether disaggregation is recommended or possible given the sample size.

- Minimum standards need to be developed for including disability in a survey focused on violence against women and for including violence against women in a disability survey.

- The Washington Group Short Set questions were developed for and can be used for census and census-like purposes, but their limitations for programmatic, monitoring and evaluation purposes should be recognized because they exclude certain types of disability and underestimate levels of disability.

- The instruments used should not rely on single questions on self-reported disability status or diagnosed health conditions as the only disability measure; a supplemental catch-all question can be incorporated where other disability measures are included in the survey. For example, in the United Kingdom census, individuals are asked, “Do you have any physical or mental health conditions or illnesses lasting or expected to last 12 months or more?” If they answered yes, a further question, “Do any of your conditions or illnesses reduce your ability to carry out day-to-day activities?” was asked. The response options were: yes, a lot; yes, a little; and not at all. The respondents were then classified as: disabled, limited a lot; disabled, limited a bit; and non-disabled.

- Other tools, for example, the Functioning and Disability Disaggregation 11, could be used to capture a broader range of disabilities and the impact of these on participation and other activities.

- While the Washington Group Short Set on Functioning, WHO Disability Assessment Schedule and the Functioning and Disability Disaggregation tools have good psychometric properties, they should continue to be tested in different contexts for cultural relevance.

- The research community should conduct methodological work to explore, identify and test disability tools for inclusion in prevalence surveys and for programmatic, monitoring and evaluation purposes.

- The types of disaggregation necessary for a study focused on violence against women or a study on disability, should be considered and the sample size calculated based on estimates of the proportion in the population (by age group) with disability to ensure the study has sufficient power. Further disaggregation of people with disabilities (by sex, disability type and age group) will require an increased sample size, but such disaggregated data may be better obtained by including questions on violence in a disability survey if this can be done safely.

- The sample size, numerators and denominators should be considered during analysis and reporting of the data. With small numbers, reporting the prevalence of disability as binary might be more accurate than reporting it by type of disability.

- A broader set of perpetrators of violence should be included, such as unpaid caregivers and service providers.

- Other questions on barriers that women with disabilities face in accessing prevention, information and response services could be incorporated into violence against women data collection tools.

- The Washington Group Short Set questions do not include disabilities related to mental health, while the Washington Group Extended Set does include questions on mental health. Validated and reliable mental health measures, for example, those in the...
WHO Multi-country Study on Women’s Health and Domestic Violence against Women (26) that have been extensively used and are comparable across studies and contexts should be used to assess disabilities related to mental health. Where these measures are included in the same survey, these data can be considered part of the reporting on disability.

- A question concerning age at onset of disability should be included to determine how long the person has been living with disability, and whether it was acquired or is from birth. Analyses should consider how the onset of disability might affect the timeframes commonly considered in violence against women surveys and the interpretation of the prevalence of violence in women with disabilities.

- Specific questions and length of tools should be considered to address accessibility issues. Longer instruments and more questions with more complex wording may limit accessibility for women who require support completing surveys. Where support is required, steps should be taken to ensure this does not interfere with the woman’s ability to disclose violence.

- Surveys should include strengths-based questions. Women with disabilities are often asked a number of questions that emphasize their disability and aspects of daily life that they cannot independently do; surveys on violence against women, including women with disabilities, should avoid reinforcing this.

### Recommendations for the ethical conduct of research

- Ethical and safety recommendations for research on violence and disability need to be developed and included in the forthcoming updated version of the WHO ethics and safety guidelines for research on violence against women.

- The framework and discourse for inclusion of women with disability in research should be shifted from “hard to reach” or “easy to ignore” to one of meaningful engagement in research and research processes. Women with disability and/or other intersecting and multiple inequalities are often easy to ignore due to the complexity of their situation, lack of dedicated resources, understanding and/or willingness to involve them.

- Researchers should operate from a framework of “dignity of risk”, and ensure that women with disabilities are enabled to make informed decisions about their own participation in research rather than excluded a priori. Dignity of risk is the concept that self-determination is important for persons with disabilities, and these persons should be able to decide autonomously what reasonable risks they want to take (27). However, dignity of risk needs to be balanced with informed decision-making, and at times, supported decision-making.

- Capacity to provide true informed consent should be assessed through accessible and rigorous procedures (for example, provision of accommodations during the informed consent process, assessment of cognitive ability to give informed consent), rather than implementing blanket exclusions of women with certain types of disability.

- Study design, data collection methods and all ethics procedures should be based on the principles of promoting the safety of women participating in the research and building trust between researchers and participants.

- Remote methods of data collection, such as online video interviews, may open up opportunities to involve women with disabilities in research. However, a tailored risk assessment is needed to identify who else may be in the environment when an interview is taking place and if/how the interviewer can assess the participant’s well-being throughout the interview.

- Referrals to violence-specific support services should be provided for women with disabilities participating in research on violence against women. It is important to ensure that these services are accessible for a spectrum of disabilities and that they have the capacity (staffing and financing) to absorb potential referrals as needed. Where necessary, capacity-building on the topic of violence may be needed for people working in organizations for disabled persons. This capacity-building can be achieved through cross-learning between partners working in violence against women and partners working in organizations for disabled persons.

- Psychological support should also be available for the research team as the interviews may affect them profoundly and may trigger previous traumatic events experienced by members of the research team.
In designing the safety protocol, disability needs to be considered and addressed. This should be done in consultation with a local disability support organization that understands the safety risks associated with help-seeking for violence against women, or a local disability support organization that has received capacity-building on the topic of violence against women.

Women with disabilities who are in the research team should be formally recognized and supported to improve their position, either economically or through further access to financially compensated opportunities because of the skills developed through participation in the study.

All data should be collected with a clear purpose, with guidance on how to interpret and use them, and recognition of their limitations.

**Recommendations for data collection**

- Universally applicable resources should be developed that have model consent forms for persons with cognitive impairment, training modules of different lengths and adaptations for online data collection.

- A data collection checklist should be developed for research on women with disabilities.

- Women with disabilities within surveys and research should be included as respondents and participants, as well as interviewers and enumerators.

- Training and support resources for female interviewers and enumerators should be developed alongside guidelines on ensuring inclusion of women with disabilities in research, in terms of recruitment, training schedule and venue. These training modules should be done by professionals and advocates who work on violence against women and/or with those specifically focusing on violence against women with disabilities.

- Safe and ethical ways of managing gatekeeping at the community and household level, which may exclude women with disabilities from participating in the research, need to be included in the training.

- Appropriate and accessible modes of data collection should be developed, and enough time and resources dedicated to ensuring necessary accommodations are made for meaningful participation of interviewers with disabilities in data collection.

- Research, including survey team training, should include sessions on: interacting with and interviewing women with different types of disability and support needs; overcoming stereotypes; and respecting women with disabilities. It may help to have some members of the field team specialized in working with persons with a range of disabilities.

**Recommendations for inclusion of women with disabilities in violence against women research**

Women with disabilities need to be included in research from the outset, and they should represent a range of visible and invisible disabilities. As such, women with disabilities need to be an integral part of all research on violence against women, from the initial planning stage onwards (this could include peer researchers). They should not be an afterthought.

- Partnerships with organizations for disabled persons (specifically, women’s wings of organizations for disabled persons or women-focused disability organizations) need to be established from the outset of research. Attention should be given to existing power imbalances which may limit access to the perspectives of women with disabilities. Reciprocal capacity development may be required for experts on violence against women and experts on disability.

- Structures need to be established for inclusion of women with disabilities at the project level to: prioritize research questions; inform study design; help design study instruments and data collection procedures; provide opportunities for feedback and discussion of all aspects of the data with the community; and evaluate the research process.

- Inclusion of women with disabilities in research as co-owners of the research and/or as participants will likely require adequate and discretionary funding to provide the necessary accommodations to facilitate full participation. This accommodation may include accessible transportation, an accompanying person and interpreters.

- Survey materials should be available in a range of accessible formats which accommodate disability.
and are inclusive. Thus, they should be in easy-to-read formats such as in large print, braille, or with technologically assisted tools, for example, electronic materials optimized for accessibility using screen readers. Communications assistants may be required for people with little or no literacy and/or communication impairments (with attention paid to confidentiality).

- Inclusion of women with disabilities in research requires flexibility, adaptability and transparency; donors, researchers and involved institutions need to acknowledge these principles. These principles include commitment to sustainable funding for follow through from design, data collection and reporting to dissemination (in accessible formats) of the findings.

Future research

- Evidence can be supplemented by improved understanding of specific forms of violence experienced by women with disabilities, and a short module focusing on these forms of violence can be developed and piloted for use within existing surveys. Development of such a module should be based on a workshop to generate consensus on items to measure violence that capture disability-specific forms of violence, such as denial of medical and personal assistance and other critical support or limiting access to necessary appliances. This workshop should include women who have different forms of disability, including under-represented forms, and women come from diverse backgrounds.

- Further psychometric work should be done to assess the strengths and limitations of the current measures (Washington Group Short Set and Functioning and Disability Disaggregation 11) and if they:
  - adequately capture the spectrum of disability and the different domains of disability (for example, activity limitations, functioning difficulties and social participation); and
  - function within and across settings and times to allow for comparison of results while taking the sociocultural context into account.

- Surveys on the prevalence of violence against women need to include disability measures, recognizing that this will provide prevalence data on violence against women with disabilities which are likely to be underestimates. Where selection of measures is limited by budgetary and logistic constraints, research teams need to recognize and clearly communicate the limitations of the selected measure, especially where it is known to underestimate the true prevalence of disability, for example, the Washington Group Short Set questions.

- Prevalence surveys can also capture the impact and consequences of violence against women with disabilities. However, they tend to include small numbers of women with disabilities reporting violence. Where population-based surveys include small numbers of such women, the limited possibilities for further disaggregation, for example by age or socioeconomic status, should be acknowledged. Alternatively, targeted oversampling or selection of particular sampling frames could be considered to include more women with disabilities.

- Measures of disability should be as inclusive as possible, both in the types of disability and types of disability-specific acts of violence they capture, and they should take into the account the need for short measures because of the constraint of overall survey length. Several forms of violence already measured in surveys on violence against women may manifest in particular ways for women with disabilities and items are needed to capture this. For example, economic intimate partner violence against women with disabilities may entail guardianship or financial administration.
Population-based survey data need to be complemented by qualitative research. Such research can often offer a safer context in which to disclose sensitive information and therefore provide more nuanced information on the interplay between different types of disability and different forms of violence against women. This information can help provide an understanding of bidirectionality, causal pathways and the dynamics of the perpetration of violence against women with disability which can inform the development of questions and tools for use in surveys.

More longitudinal research is needed to track changes in the prevalence of violence and disability over time, and to assess reciprocal causality between disability and violence against women.

Intervention research is needed, including randomized controlled trials, to assess what works to prevent violence against women with disabilities and how best to respond to their needs.

Policy research is needed to identify if and how specific policies affect women with disabilities and their experience of violence.

Conclusion and next steps

Existing evidence shows that women with disabilities experience higher levels of violence, including intimate partner violence and sexual violence. Current estimates are likely significant underestimates as women with disabilities tend to be under-represented in surveys and may also experience disability-specific types of violence that are often unmeasured. Efforts to strengthen the availability and quality of data on violence against women with disabilities need to consider both the inclusion of appropriate and feasible measures of disability within research on violence against women and of violence against women within research on disability. Improving the inclusion of women with disabilities and the issue of disability within violence against women population-based surveys is necessary for an improved understanding of the risk factors for violence against women. Women with disabilities also need to be included in the survey and research teams and throughout the process including in the research design, implementation, and data analysis and interpretation. Measures also need to be taken to increase the accessibility of women with disability to participate as respondents in surveys. This should contribute to a better understanding of the specific needs of women with disabilities subjected to violence and allow more tailored prevention strategies and response/services and programmes to be devised that address those needs.

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