

Vulnerability to violence and abuse among people with disabilities

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Abstract

Despite increasing reports of violence against people with disabilities, little is known about this phenomenon in the Italian context. The purpose of this study was to document the self-reported prevalence of abuse in adults with disabilities.

The Abuse Assessment Screen – Disability was administered to 237 Italian individuals with disabilities (49.4% men; 50.6% women), with a mean age of 44.1 years (SD = 14.20). The prevalence of any type of abuse (traditional or disability-related) in the last year was 19.4%. The rate of traditional types of abuse (physical or sexual) was 9.7% in the last year, while for physical abuse the comparable rate was 8.0% and for sexual abuse, 1.7%. Meanwhile, the rate for any type of disability-related abuse was 9.7%; the rate of being prevented from using a wheelchair, cane, respirator or assistive devices was 3.0%, the rate of refusal of help with an important personal need was 6.8%. There were no gender differences in the prevalence of abuse reported. The results of the survey suggest that Italian people with disabilities are often victims of violence

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by multiple perpetrators. Therefore, primary and secondary prevention efforts should be undertaken to target specifically people with disabilities.

Keywords: Disabilities; Interpersonal violence; Sexual abuse; Physical abuse.

1. Introduction

According to the United Nations' (UN, 2007) Convention of the Rights of Persons with Disabilities (CRPD), people with disabilities are defined as those “*who have a long-term physical, mental, intellectual or sensory impairment which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others*” (CRPD, art. 1). The World Report on Disability (World Health Organization and the World Bank, 2011) points out that the prevalence of disability in the adult population aged 18 years and over was estimated as being from 15.3% to 15.6% of the world's population, with the risk of disability increasing with age and with exposure to less advantageous socioeconomic circumstances (Office for Disability Issues, 2011).

Studies conducted in Europe, North America, and Australia have shown that people with disabilities are significantly more likely to experience all types of violence whether measured over 12 months, over 5 years, or over a lifetime, and are also likely to suffer mental health problems more frequently than with people without disabilities (e.g., Mitra, Manning, & Lu, 2012; Khalifeh, Howard, Osborn, Moran, & Johnson, 2013; Balderston, 2014; Emerson & Roulstone, 2014; Mitra, Mouradian, Fox, & Pratt, 2015; Olofsson, Lindqvist, & Danielsson, 2015; Krnjacki, Emerson, Llewellyn, & Kavanagh, 2016). For instance, in the United States, Mitra and Mouradian (2014) found that men and women with disabilities are more likely to experience intimate partner violence than people without disabilities, both during the previous 12 months and on a lifetime basis.

Nevertheless, these international studies have yielded disparate measures of the prevalence of violence against people with disabilities. This variation may correspond in part to differences in sampling methods (e.g., probabilistic or non-probabilistic) and methodological characteristics of the different studies (Hughes, Lund, Gabrielli, Powers, & Curry, 2011; Yoshida, DuMont, Odette, & Lysy, 2011). For instance, the studies differ in their definitions of disability, their definitions of violence (e.g., intimate partner violence, domestic violence), the types of violence measured (e.g., physical violence, emotional and psychological violence, and sexual violence), the recall period for reporting (e.g., last year, last 5 years or lifetime), and the reference population of people with disabilities. Consequently, as Yoshida and colleagues (2011) point-out, we must be cautious in comparing the findings on violence toward people with disabilities across studies.

A systematic review of the literature on violence against people with disabilities found that the prevalence of any type of violence among women with disabilities ranged from 26.0% to 90.0% on a lifetime basis, 4.9% to 29.1% for the previous 5 years, and 2.0% to 70.0% for the previous year. Meanwhile, the reported prevalence of any type of violence for men with disabilities ranged from 28.7% to 86.7% within a lifetime; 24.9% for the past 5 years; and 36.7% for the previous year (Hughes *et al.*, 2011).

This body of research suggests that women and men with disabilities might differ in their experience of violence, according to gender (e.g., Haydon, McRee, & Tucker Halpern, 2011; Mitra, Mouradian, & Diamond, 2011; Hughes, Bellis, Jones, Wood, Bates, Eckley *et al.*, 2012; Olofsson *et al.*, 2015; Krnjacki *et al.*, 2016). For instance, Krnjacki and colleagues (2016) found that women with disabilities were more likely to experience sexual and domestic violence, while men were more likely to experience physical violence. In the same line, Mitra and colleagues (2011) also found a higher prevalence of sexual abuse among women with disabilities compared to men with disabilities.

Finally, this body of research has shown that violence and abuse toward people with disabilities can occur both in a domestic context and in hospital or care facilities, in schools, on public transportation, etc. (e.g., Nosek, Foley, Hughes, & Howland, 2001; Eastgate, Van Driel, Lennox, & Scheermeyer, 2011; Rowsell, Clare, & Murphy, 2013; Emerson & Roulstone, 2014). These studies have allowed a clarification of the abuse and maltreatment of women and men with various forms of disabilities, and has highlighted how important it is to gain knowledge of these issues, to improve their living conditions.

Nevertheless, little is known about the abuse experienced by people with disabilities in an Italian context. Consequently, the present study analyzes the extent of this phenomenon in the Turin metropolitan area and measures the effect abuse has on the lives of people with disabilities.

Therefore, this research project aims to examine these phenomena in depth, in particular, to uncover the relationship between types of disability and the abuse of adults (sexual, physical, or based on negligence or rejection). It also seeks to identify the cases of maltreatment and violence that occur, often at home, and to document the isolation and marginalization of these people. The ultimate aim of the study is not to discover something entirely new through the survey process, but to bring to light events too often buried and ignored.

2. Methods

2.1. Participants

Data for this study was collected from a cross-sectional survey of people with disabilities from the city of Turin, Italy, using a non-probabilistic (convenience) sample. Participants were recruited voluntarily in the disability center belonging to the municipality of Turin, which offers services to people with disabilities. One of the researchers asked people who visited the center to participate voluntarily in the project while ensuring privacy and anonymity. When the questionnaires were filled out, they were placed anonymously in sealed, white envelopes.

The initial sample comprised 250 participants. Of these respondents, 13 did not answer the questions concerning their experiences of abuse within the past year. Consequently, these partial non-response cases were excluded from the sample.

The final sample consisted of 237 participants. Of these, 49.4% were male ($n = 117$), 50.2% were female ($n = 119$) and .4% did not provide their gender ($n = 1$), with ages ranging from 17 to 83 years ($M = 44.1$ years, $SD = 14.2$ years). The mean age for males was 45.1 years ($M = 47$, $SD = 14.5$) and the mean age for females was 43.0 years ($M = 46$, $SD = 14.32$). There was no significant statistical difference between females and males in terms of age ($F(1, 227) = 1.201$, $p = .27$, Cohen's $d = .14$, 95 CI% [-.11, .40]).

Table 1 shows the socio-demographic characteristics of the participants, including types of disabilities. The most frequent type of disability reported was in motor skills (38.4%), followed by physical disabilities (20.3%). Furthermore, 2.5% of the participants presented other forms of disability including serious oncological conditions, lack of hemoglobin and obesity. Finally, most of participants (53.6%) were not born with their disabilities, but acquired them during their lifetime (see Tab. 1 for a further description of the characteristics of the sample).

Table 1 - *Socio-demographic and psychosocial characteristics of participants*

	<i>n</i>	%
Type of disability		
Physical	48	20.25
Physical and motor	47	19.83
Physical and others	9	3.80
Intellectual and others	12	5.06
Motor	91	38.40
Motor and others	7	2.95
Sensory and others	15	6.33
Others	6	2.53
Not reported	2	.84
Born with disability		
Yes	109	45.99
No	127	53.59
Not reported	1	.42
Country of origin		
Born within Italy	219	92.41
Born outside Italy	18	7.59
Italian parents		
Yes	216	91.14
No	19	8.02
Not reported	2	.84
Mother's language		
Italian	217	91.56
Other Language	16	6.75
Not reported	4	1.69
Sexual orientation		
Heterosexual	223	94.09
Bisexual	5	2.11
Homosexual	3	1.27
Not reported	6	2.53
Marital status		
Single	149	62.87
Cohabitant	11	4.64
Married	47	19.83
Separated	8	3.38
Divorced	13	5.49
Widow/er	8	3.38
Not reported	1	.42

Occupational status		
Employed	95	40.08
Retired	30	12.66
Students	11	4.64
Unemployed	28	11.81
Not reported	73	30.80
Education level		
No qualification	1	.42
Elementary school	4	1.69
Middle school	46	19.41
2/3 years of High school	33	13.92
High school	74	31.22
A few years of University	27	11.39
University degree	30	12.66
Post-university specialization	12	5.06
Not reported	10	4.64

2.2. Survey instrument

To determine the frequency, type, and perpetrator of abuse toward women and men with disabilities the research team developed a survey instrument, which consisted of two sections. The first section included questions concerning socio-demographic variables: sex, age, sexual orientation (self-identification coded as gay male, lesbian female, bisexual or heterosexual), nationality, educational attainment, occupation, place of birth, mother tongue, marital status, type of disability (using a closed-ended checklist), and time of appearance of disability (at birth or later).

The second section included two questions about the respondent's possible experience of violence prior to becoming disabled, elaborated by the research team, and the four questions on the Abuse Assessment Screen – Disability (AAS-D, McFarlane, Hughes, Nosek, Groff, Swedlend, & Mullen, 2001).

2.2.1. Violence prior to disability

This element was operationalized using a question in which participants were asked: “Have you experienced any violence prior to the emergence of your disability?” (Yes or no).

2.2.2. *Violence causing disability*

This element was operationalized using a question in which participants were asked. “Did the violence experienced cause your disability?” (Yes or no).

2.2.3. *Abuse Assessment Screen – Disability*

This brief but widely used and respected questionnaire (McFarlane *et al.*, 2001) comprises four questions about abuse, assessing traditional abuse (two items) and disability-related abuse (two items) with a 12 month recall period. Concerning traditional abuse, it asks “Within the last year, have you been hit, slapped, kicked, pushed, shoved, or otherwise physically hurt by someone?” and “Within the last year, has anyone forced you to perform sexual activities?” For disability-related abuse, the questions are, “Within the last year, has anyone prevented you from using a wheelchair, cane, respirator, or other assistive device?” and “Within the last year, has anyone you depend on refused to help you with an important personal need, such as taking your medicine, getting to the bathroom, getting out of bed, bathing, getting dressed, or getting food or drink?” To complete these answers, in the case of a positive response, the question was added, “If yes, who? Intimate partner, Care provider, Health professional, Family member, or Other” (more than one response is possible).

The AAS-D was translated into Italian by applying the standard back-translation procedure, which involved translations from English/Italian to Italian and vice versa. Participants were instructed to consider the past 12 months, specifically.

2.3. *Procedure*

The present research project was conducted by the Turin Psychology Department, in a cooperative agreement with Associazione Verba, a non-profit association founded in 1999 in Turin, which promotes specific initiatives in the field of equal opportunities and social inclusion with a special focus on the problems of disability. The project also relied on the help offered by the municipality of Turin, through the help desk of its Passepartout Service, which, carried out the project, with the assistance of Associazione Verba. The survey instrument was administered primarily using paper and pencil; only in case of motor difficulty were participants given the opportunity to use an electronic version of the questionnaire. Data were collected between November 2014 and December 2015.

2.4. *Compliance with ethical standards*

Informed consent to take part in the research was collected from all individuals participating, along with written consent describing the nature and objectives of the study according to the ethical code of the Italian Association for Psychology (AIP) and adhering to the requirements for privacy specified by Italian law (Law decree DL196/2003). Regarding ethical standards for research, the study referred to the last version of the Helsinki Declaration (World Medical Association, 2013). The study was approved by the Ethics Review Board of the University of Turin (approval number: 47546).

3. Data Analysis

The analysis calculated the prevalence of each item, providing 95% Confidence Intervals (CIs) for all elements. To calculate the confidence interval for percentages, we used score methods based on the work of Newcombe (2012). In addition, prevalence, with a 95% CI, was used to analyze gender differences in reported abuse. In general, when comparing two parameter estimates, the estimates are found to show a statistically significant difference if the CIs do not overlap (Altman, Machin, Bryant, & Gardner, 2000). These analyses were performed using the statistical program IBM SPSS v. 20 for Windows.

4. Results

Only 4.6% (95% CI [2.6, 8.1]) of the participants reported having been abused prior to the onset of their disability, and 1.7% (95% CI [.7, 4.3]) of them said that this violence had caused their disability.

Using the four-question AAS-D, 19.4% (95% CI [14.9, 24.9]) of the participants reported any type of abuse in last year. By sex, 17.9% of men (95% CI [12.0, 25.9]) and 21.0% of women (95% CI [14.65, 29.2]) reported any type of abuse. There was a high degree of overlap between these confidence intervals; therefore, there was no statistically significant difference between men and women in the prevalence of any type of abuse reported.

4.1. Traditional abuse: Physical and sexual abuse in the previous year

Overall, the prevalence of any type of traditional abuse (physical or sexual abuse) experienced in the past year was 9.7% (95% CI [6.6, 14.1]). By sex, 8.55% of men (95% CI [4.7, 15.0]) and 10.9% of women (95% CI [6.5, 17.8]) reported any type of traditional abuse. Again, there was a high overlap between these confidence intervals; thus, there was no statistically significant difference between men and women in the prevalence of any type of abuse reported.

In addition, the prevalence of physical abuse experienced in the past year was 8.0% (95% CI [5.2, 12.2]), for sexual abuse was 1.7% (95% CI [.7, 4.3]) and for physical and sexual abuse was 1.3% (95% CI [.4, 3.7]). Table 2 shows the prevalence of traditional abuse, physical as well as sexual, during the past 12 months according to socio-demographic characteristics. By gender, 6.8% (95% CI [3.5, 12.9]) of men and 9.2% (95% CI [5.2, 15.8]) of women experienced physical abuse, and 1.7% (95% CI [.5, 6.0]) of men and 1.7% (95% CI [.5, 5.9]) of women experienced sexual abuse. There were no statistically significant differences between men and women concerning physical or sexual abuse, because the confidence intervals for the prevalence of both of these overlapped considerably (see Tab. 2 for additional socio-demographic information about the sample, such as type of disability, sexual orientation, marital status, education level, and occupational status).

Table 2 - *Prevalence of traditional abuse within the past year by socio-demographic characteristics [95% confidence intervals]*

	Physical Abuse		Sexual Abuse		Physical and Sexual Abuse	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Sex						
Men (<i>n</i> = 117)	8	6.84 [3.51, 12.91]	2	1.71 [.47, 6.02]	1	.85 [.15, 4.68]
Women (<i>n</i> = 119)	11	9.24 [5.24, 15.80]	2	1.68 [.46, 5.92]	2	1.68 [.46, 5.92]

Vulnerability to violence and abuse among disabled people

Type of disability						
Physical (n = 48)	3	6.25 [2.15, 16.84]	0	0 [0, 7.41]	0	0 [0, 7.41]
Physical and motor (n = 47)	4	8.51 [3.36, 19.93]	2	4.26 [1.17, 14.25]	1	2.16 [.38, 11.11]
Physical and other (n = 9)	1	11.11 [1.99, 43.50]	1	11.11 [1.99, 43.50]	1	11.11 [1.99, 43.50]
Motor (n = 91)	6	6.59 [3.06, 13.65]	0	0 [0, 4.05]	0	0 [0, 4.05]
Motor and other (n = 7)	0	0 [0, 35.43]	0	0 [0, 35.43]	0	0 [0, 35.43]
Intellectual and other (n = 12)	2	16.67 [4.70, 44.80]	0	0 [0, 24.25]	0	0 [0, 24.25]
Sensory and other (n = 15)	1	6.67 [1.19, 29.82]	0	0 [0, 20.39]	0	0 [0, 20.39]
Other and not reported (n = 8)	2	25 [7.15, 59.07]	1	12.50 [2.24, 47.09]	1	12.50 [2.24, 47.09]
Sexual orientation						
Bisexual (n = 5)	0	0 [0, 43.45]	0	0 [0, 43.45]	0	0 [0, 43.45]
Heterosexual (n = 223)	18	8.07 [5.17, 12.40]	4	1.79 [.70, 4.52]	3	1.35 [.46, 3.88]
Homosexual (n = 3)	0	0 [0, 56.15]	0	0 [0, 56.15]	0	0 [0, 56.15]
Not reported (n = 6)	1	16.67 [3.01, 56.35]	0	0 [0, 39.03]	0	0 [0, 39.03]
Marital Status						
Single (n = 149)	7	4.70 [2.29, 9.38]	2	1.34 [.37, 4.76]	1	.67 [.12, 3.70]
Cohabitant (n = 11)	2	18.18 [4.14, 47.70]	1	9.09 [1.62, 37.74]	1	9.09 [1.62, 37.74]
Separated/divorced (n = 21)	4	19.05 [7.67, 40]	0	0 [0, 15.46]	0	0 [0, 15.46]
Married (n = 47)	3	6.38 [2.19, 17.16]	1	2.13 [.38, 11.11]	1	2.13 [.38, 11.11]
Widow/er (n = 8)	3	37.50 [13.68, 69.43]	0	0 [0, 32.44]	0	0 [0, 32.44]
Education level						
No qualification (n = 1)	0	0 [0, 79.35]	0	0 [0, 79.35]	0	0 [0, 79.35]
Elementary school (n = 4)	2	50 [15, 85]	0	0 [0, 48.99]	0	0 [0, 48.99]
Middle school (n = 79)	3	3.80 [1.30, 10.58]	1	1.27 [.22, 6.83]	0	0 [0, 4.64]
High school (n = 101)	9	8.91 [4.76, 16.07]	3	2.97 [1.02, 8.37]	3	2.97 [1.02, 8.37]
University (n = 42)	5	11.90 [5.19, 25]	0	0 [0, 8.38]	0	0 [0, 8.38]
Not reported (n = 10)	0	0 [0, 27.75]	0	0 [0, 27.75]	0	0 [0, 27.75]

Occupational status						
Employed (<i>n</i> = 95)	6	6.32 [2.93, 13.10]	0	0 [0, 3.89]	0	0 [0, 3.89]
Unemployed (<i>n</i> = 28)	4	14.29 [5.70, 31.49]	2	7.14 [1.98, 22.65]	2	7.14 [1.98, 22.65]
Retired (<i>n</i> = 30)	2	6.67 [1.85, 21.32]	0	0 [0, 11.35]	0	0 [0, 11.35]
Students (<i>n</i> = 11)	2	18.18 [5.14, 47.70]	0	0 [0, 25.88]	0	0 [0, 25.88]
Not reported (<i>n</i> = 73)	5	6.85 [2.96, 15.05]	2	2.74 [.75, 9.45]	1	1.37 [.24, 7.36]

Among people with disabilities who reported they had been victims of physical abuse (*n* = 19), 57.9% were women (*n* = 11) and 94.7% self-identified as heterosexual (*n* = 18); 78.9% were born in Italy (*n* = 15) and 47.4% had a high school diploma, while 26.3% had a college degree. Regarding the type of disability, 31.6% of those reporting physical abuse identified themselves as having a motor skill disability (*n* = 6), 21.0% a physical and motor disability (*n* = 4), 15.8% a physical disability (*n* = 3), 10.5% intellectual disability (*n* = 2) and 5.3% a sensory and another disability (*n* = 1), and 5.3% physical and another disability (*n* = 1); 5.3% reported having another disability not elsewhere specified (*n* = 1), while 5.3% did not respond to the question (*n* = 1). Concerning marital status, 36.8% identified themselves as single (*n* = 7), 26.3% were married or were living with their partner (*n* = 5), 21.05% were separated or divorced (*n* = 4), and 15.8% were widowed (*n* = 3).

Among people with disabilities who reported having been victims of sexual abuse (*n* = 4), 50% were men; 100% self-identified as heterosexual; 75% were born in Italy (*n* = 3) and 75% had attained a high school diploma (*n* = 3). Regarding types of disabilities, 50% reported having a physical motor skill disability (*n* = 2), 25% another physical disability (*n* = 1) and 25% did not respond to the question (*n* = 1). Concerning marital status, 50% were single and 50% were married or were living with their partner.

Regarding those who perpetrated the abuse, 25.3% of physical abuse was attributed to intimate partners, 15.8% to family members, including children, 5.3% to health professionals, 2.3% to care providers, and 68.4% to other persons, such as strangers in buses, taxi-drivers, etc. (more than one answer was possible). Meanwhile, 75% of sexual abuse was attributed to intimate partners and 25% to other persons. Finally, 100% of respondents reporting physical and sexual abuse attributed their abuse to intimate partners.

When physical or sexual abuse was perpetrated by persons other than intimate partners or family members, participants reported that these

episodes occurred mainly on public transport (such as on buses or in taxicabs), with violent incidents and thefts occurring in cities, in the workplace, and in medical settings (perpetrated by health professionals).

4.2. Disability-related abuse in the past year

Overall, the prevalence of any type of disability-related abuse in the past year was 9.7% (95% CI [6.6, 14.14]). By sex, 9.4% of men (95% CI [5.3, 16.1]) and 10.3% of women (95% CI [6.0, 17.1]) reported any type of disability-related abuse. There was no statistically significant difference between men and women in the prevalence of any type of disability-related abuse, given the high overlap between the confidence intervals.

The prevalence of episodes where someone prevented participants from using a wheelchair, cane, respirator, or other assistive devices in the past year was 2.9% (95% CI [1.4, 6.0]), with 42.9% of these episodes being perpetrated by intimate partners, 28.6% by health professionals, 14.3% by family members and 28.6% by other persons.

The prevalence of episodes where someone on whom the participants depend refused to help them with an important personal need – such as taking their medicine, getting to the bathroom, getting out of bed, bathing, getting dressed, or getting food or drink – in the past year was 6.8% (95% CI [4.2, 10.7]), with 37.5% of these episodes being perpetrated by intimate partners, 18.4% by family members, 6.3% by health professionals, 6.3% by care providers and 31.3% by other persons.

Table 3 shows the prevalence of disability-related abuse experienced over the previous year, according to various socio-demographic characteristics.

Table 3 - *Prevalence of disability-related abuse within the past year by socio-demographic characteristics [95% confidence intervals]*

	Prevented		Refused		Disability-related abuse	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Sex						
Men (<i>n</i> = 117)	4	3.42 [1.34, 8.46]	7	5.98 [2.93, 11.84]	1	.85 [.15, 4.68]
Women (<i>n</i> = 119)	3	2.52 [.86, 7.15]	9	7.56 [4.03, 13.75]	2	1.68 [.46, 5.92]

Type of disability						
Physical (n = 48)	0	0 [0, 7.41]	3	6.25 [2.15, 16.84]	0	0 [0, 7.41]
Physical and motor (n = 47)	2	4.26 [1.17, 14.25]	3	6.38 [2.19, 17.16]	1	2.13 [.38, 11.11]
Physical and other (n = 9)	1	11.11 [1.99, 43.50]	1	11.11 [1.99, 43.50]	1	11.11 [1.99, 43.50]
Motor (n = 91)	4	4.40 [1.72, 10.76]	5	5.49 [2.37, 12.22]	1	1.10 [.19, 5.96]
Motor and other (n = 7)	0	0 [0, 35.43]	0	0 [0, 35.43]	0	0 [0, 35.43]
Intellectual and other (n = 12)	0	0 [0, 24.25]	1	8.33 [1.49, 35.39]	0	0 [0, 24.25]
Sensory and other (n = 15)	0	0 [0, 20.39]	2	13.33 [3.74, 37.88]	0	0 [0, 20.39]
Other and not reported (n = 8)	0	0 [0, 32.44]	1	12.50 [2.24, 47.09]	0	0 [0, 32.44]
Sexual orientation						
Bisexual (n = 5)	0	0 [0, 43.45]	0	0 [0, 43.45]	0	0 [0, 43.45]
Heterosexual (n = 223)	7	3.14 [1.53, 6.34]	16	7.17 [4.46, 11.34]	3	1.35 [.46, 3.88]
Homosexual (n = 3)	0	0 [0, 56.15]	0	0 [0, 56.15]	0	0 [0, 56.15]
Not reported (n = 6)	0	0 [0, 39.03]	0	0 [0, 39.03]	0	0 [0, 39.03]
Marital status						
Single (n = 149)	1	.67 [.12, 3.70]	7	4.70 [2.29, 9.38]	0	0 [0, 2.51]
Cohabitant (n = 11)	1	9.09 [1.62, 37.74]	3	27.27 [9.75, 56.56]	0	0 [0, 25.88]
Separated/divorced (n = 21)	0	0 [0, 15.46]	1	4.76 [.85, 22.67]	0	0 [0, 15.46]
Married (n = 47)	5	10.64 [4.63, 22.59]	4	8.51 [3.36, 19.93]	3	6.48 [2.19, 17.16]
Widow/er (n = 8)	0	0 [0, 32.44]	1	12.50 [2.24, 47.09]	0	0 [0, 32.44]
Education level						
No qualification (n = 1)	0	0 [0, 79.75]	0	0 [0, 79.75]	0	0 [0, 79.75]
Elementary school (n = 4)	0	0 [0, 48.99]	0	0 [0, 48.99]	0	0 [0, 48.99]
Middle school (n = 79)	4	5.06 [1.99, 12.31]	7	8.86 [4.36, 17.18]	0	0 [0, 4.64]
High school (n = 101)	3	2.97 [1.02, 8.37]	5	4.95 [2.13, 11.07]	0	0 [0, 3.66]
University (n = 42)	0	0 [0, 8.38]	3	7.14 [2.46, 19.01]	0	0 [0, 8.38]
Not reported (n = 10)	0	0 [0, 27.75]	1	10 [1.79, 40.42]	0	0 [0, 27.75]

Occupational status						
Employed (<i>n</i> = 95)	4	4.21 [1.65, 10.33]	4	4.21 [1.65, 10.33]	0	0 [0, 3.89]
Unemployed (<i>n</i> = 28)	1	3.57 [.63, 17.71]	2	7.14 [1.98, 22.65]	1	3.57 [.63, 17.71]
Retired (<i>n</i> = 30)	1	3.33 [.59, 16.67]	3	10 [3.46, 25.62]	1	3.33 [.59, 16.67]
Students (<i>n</i> = 11)	0	0 [0, 25.88]	0	0 [0, 25.88]	0	0 [0, 25.88]
Not reported (<i>n</i> = 73)	1	1.37 [.24, 7.36]	7	9.59 [4.72, 18.50]	1	1.37 [.24, 7.36]

Note: Prevented = prevented from using wheelchair, cane or other assistive devices; Refused = refused to help the person with some important personal need.

Among people with disabilities who reported they had been prevented from using a wheelchair, cane, respirator or other assistive device (*n* = 7), 100% self-identified as heterosexual and as being born in Italy (*n* = 7); 57.1% were male (*n* = 4); 57.1% had completed middle school (*n* = 4) as their highest level of education, while 42.9% had a high school diploma (*n* = 3). Regarding the typology of disability, 57.1% reported having a motor skill disability (*n* = 4), 28.6% reported physical and motor skill disabilities (*n* = 2) and 14.3% a physical and another disability (*n* = 1). Concerning marital status, 85.71% were married or were living with their partner and 14.29 were single (*n* = 1).

Among people with disabilities who reported someone, on whom they depended, who refused in the past year to help with an important personal need such as taking medicine, using the toilet, getting out of bed, washing, dressing, or getting food or drink (*n* = 16), all of them self-identified as heterosexual, 56.3% were women (*n* = 9), 87.5% were born in Italy, 43.8% had completed middle school, 43.8% were single and 43.8% were married or living with their partners. Concerning the type of disability, 31.3% reported having a motor skill disability (*n* = 5), 18.8% (*n* = 3) a physical and a motor skill disability (*n* = 3), 18.8% a physical and another disability, 12.5% a sensory and another disability (*n* = 2), 6.3% a physical and another disability (*n* = 1), 6.3% an intellectual and another disability (*n* = 1) and 6.3% did not answer the question (*n* = 1).

Finally, the combined incidence of the two preceding questions was 1.3%, (95% CI [.4, 3.7]) with 100% of these behaviors perpetrated by partners. When abuse was committed by another person, participants usually reported that episodes occurred in the workplace.

5. Discussion

The aim of this study was to investigate the prevalence of violence against men and women with disabilities in an Italian context. Our survey found that approximately 20% of Italian people with disabilities experienced some type of abuse during the previous 12 months. These findings are consistent with prior studies that reported the prevalence of abuse among people with disabilities ranging from 2.0% to 70.0% for the preceding year (Hughes *et al.*, 2011).

In addition, our results showed a higher rate for each type of violence measured than was previously reported by McFarlane *et al.* (2001), in a study of women with physical disabilities using the same measurement instrument (AAS-D). It is possible that the discrepancy between findings could arise from differences in the administration of the AAS-D. While McFarlane and colleagues administered this instrument orally, we used a paper and pencil approach, with an electronic version only available for respondents with motor difficulties. Embarrassment and shame might discourage respondents from reporting the abuse they had experienced; therefore, the previous study might not capture the real frequency of abuse.

On the other hand, people with disabilities who were victimized reported various types of abuse. Physical abuse was reported most frequently, which is consistent with studies from other countries (e.g., Ballan, Burke-Freyer, & Powledge, 2015). From a health care provider standpoint, these findings suggest that people with disabilities who are experiencing abuse might present identifiable injuries during medical office visits, implying the opportunity to implement disability-sensitive screening for abuse. In addition, as Brodwin and Siu (2007) point-out, violence dramatically and indelibly affects men and women with disabilities “not only physically but mentally and emotionally”. Therefore, health and welfare providers (clinical, welfare, and public health services) are expected to play important roles in identifying and providing appropriate services for people with disabilities experiencing abuse (Mitra & Mouradian, 2014). Consequently, training programs should help health professionals to identify abuse episodes in people with disabilities and to help them identify the community resources available to deal with the abuse-related needs of this group (Ballan *et al.*, 2015).

Regarding the typology of disability and violence, the rate of abuse varied among victims depending on the types of disabilities they had. The participants with motor skill disabilities reported the highest rates of abuse,

followed by those with motor and physical disabilities, as previously found by Frazão, Silva, Norton and Magalhães (2014). These authors found that elderly women with motor disabilities appear to have a higher risk of domestic violence than women with other disabilities. In addition, our findings showed a lower prevalence of violence among people with sensory or intellectual disabilities compared to people with other types of disabilities, which might be due to a limited number of cases in our study. The small subsample (only 12 people with intellectual disabilities and 15 people with sensory disabilities) might explain the perceived lower prevalence of abuse as a statistical fluke. This result might also arise from participation bias; that is, the survey was designed for the general population, and individuals with significant intellectual or sensory disabilities might have declined to participate in the survey, or found it difficult to complete (Khalifeh *et al.*, 2013).

Regarding gender differences in their exposure to violence, unlike previous studies, we did not find differences between men and women with disabilities (e.g., Haydon *et al.*, 2011; Krnjacki *et al.*, 2015; Olofsson *et al.*, 2015). Nevertheless, Olofsson and colleagues (2015) pointed-out that although they had found some gender difference in exposure to violence, there was no clear trend.

Finally, the finding that stands out in this study is the considerable prevalence of abusive intimate partners, an element confirmed by numerous other researchers (e.g., Young, Nosek, Howland, Chanpong, & Rintala, 1997; McFarlane *et al.*, 2001; Nixon, 2009; Crowe, 2013; Frazão *et al.*, 2014; Ballan *et al.*, 2015). The experience of violence from an intimate partner, as from a family member, involves a progressive reduction of the power of the person victimized and the growth of the abuser's control over the life and actions of that person, who is typically proven to be both submissive and vulnerable (Young *et al.*, 1997). In addition, the abuse also was attributed to family members, care providers, health professionals and other people (such as strangers). Meanwhile, Ballan and colleagues (2015) found that 66.2% of the abuse reported by people with disabilities was attributed to intimate partners, 16.2% was attributed to family members, including children, and 7.3% to other people. In general, people with disabilities experience violence at the hands of their family (including partners, brothers, children, children-in-law, grandchildren, etc.), extended family, and other people, including persons known to them (such as health professionals, care providers, etc.), strangers, and multiple persons (Hassouneh-Phillips & Curry, 2002; Martin, Ray, Sotres-Alvarez, Kupper,

Moracco, Dickens, *et al.*, 2006; Plummer & Findley, 2012; Rowsell *et al.*, 2013; Frazão *et al.*, 2014; Mitra *et al.*, 2015; Shah, Tsitsou, & Woodin, 2016). Consequently, they experience abuse in such different settings as their homes, workplaces, medical settings, hospitals, public transportation, etc. Consequently, people with disabilities should be asked about possible violence perpetrated by a wide range of individuals, and about the context within which the violence occurred (Nosek *et al.*, 2001; Martin *et al.*, 2006). This research project, while confirming these expectations, has not produced significant findings but has confirmed that violence toward disabled men and women also exists in urban areas; although widespread, it is at the same time concealed, as is shown by the many cases of omitted responses. Furthermore, prior research has found that people with disabilities are at a greater risk of being exposed to abuse than people without disabilities, that abuse has consequences for health and even contributes to the emergence of certain disabilities (World Health Organization and the World Bank, 2011; Plumer & Findley, 2012; Ballan *et al.*, 2015; Giraldo-Rodriguez, Rosas-Carrasco, & Mino-Leon, 2015; Krnjacki *et al.*, 2016; Shah *et al.*, 2016). For example, anxiety, anguish or fear, depression, and a need to escape (leave their house) have been pointed-out as psychological consequences of abuse (e.g., Eastgate *et al.*, 2011; Rowsell *et al.*, 2013; Frazão *et al.*, 2014).

Therefore, primary and secondary violence-prevention efforts might be targeted toward those who have a disability (Breiding & Armour, 2015). In addition, prevention efforts should be attuned to the special needs of people with disabilities. For instance, the risk of abuse and neglect of women with disabilities has been attributed to such factors as their relative isolation, dependency as a result of disability, difficulties identifying and naming disability-related abuse and cultural or societal barriers (Plummer & Findley, 2012). Consequently, efforts to enhance the independence of all people with disabilities could be both a key primary and secondary prevention strategy.

We acknowledge some limitations of our study, which mandate caution in the interpretation of its findings. The (non-probabilistic) sampling procedure used and small sample size limit the external validity of our findings. In addition, the violence measures included in this study only include one question for (non-sexual) physical violence, and two questions for abuse related to disability. Moreover, this instrument did not include questions on financial abuse, emotional abuse, or stalking, so it might underestimate the prevalence of violence. International studies have shown that emotional abuse is the one of the most prevalent forms of abuse among

people with disabilities (e.g., Baladerian, Coleman, & Stream, 2013; Frazão *et al.*, 2014). More studies about different types of violence against men and women with disabilities in the Italian setting are therefore needed. Such studies should use larger, random samples with more attention paid to the type of disability as a factor in abuse.

Despite the limitations identified above, the findings of this study are consistent with those of prior research. Our study represents the first research on the prevalence of violence against people with disabilities, in an Italian context. In this sense, the study allows a more detailed view of the prevalence of this phenomenon, given the limitations mentioned above.

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