

Abuse of Elders Living at Home: A Review of Recent Prevalence Studies

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This article presents evidence from recent studies on the prevalence of different forms of elder abuse. After a review of definitions and measures of elder abuse, the findings of 20 original studies containing 26 samples from 17 countries published since 2010 are summarized. Overall prevalence rates showed a high variability across studies, ranging from 2.2% in a study from Ireland to 43.7% in a study from Egypt. Evidence on gender differences in the vulnerability for abuse and the predominant relationship constellations between abusers and victims did not yield a consistent picture across studies. Conceptual and methodological reasons for the variability in prevalence rates are discussed, and an outlook for future research is presented. In particular, consistent definitions and measures are needed to facilitate the comparative analysis of elder abuse in different studies and cultural contexts.

Keywords: elder abuse, neglect, prevalence, family, violence, review

Countries worldwide are confronted with a growth of their aging population due to increased life expectancies related to social and economic development and a resulting improvement of physical health as well as medical care. In 2015, one out of eight persons worldwide was aged 60 years or over, and the rate is expected to go up to one out of six by 2030 (United Nations, 2015). Despite the many positive aspects of the increase in life expectancy, it also means that the number of people who are no longer able to live an independent life and require regular care and assistance by others is increasing. Being dependent on the care of others, often provided by family members, elders living at home are a vulnerable group with respect to different forms of maltreatment and neglect (WHO, 2014). Compared to other forms of domestic violence, such as physical or sexual child abuse or intimate partner violence, elder abuse has taken longer to be recognized as a problem (Barnett, Miller-Perrin, & Perrin, 2011). It used to be regarded as a private issue, also a taboo topic, which received comparatively little attention in both public awareness and scientific research.

The abuse of elderly persons was first recognized in the 1970s under the description of “granny battering”, and investigations into the problem were slow to start (WHO & INPEA, 2002). In recent years, more attention has been paid to the study of elder abuse in countries around the globe. The purpose of this paper is to review the current state of knowledge concerning the prevalence of elder abuse in different parts of the world. Gaining a clear picture of how widespread the experience of abuse is among the elderly in different countries is a critical prerequisite for taking appropriate social policy steps, including the designing and implementation of safeguards and prevention measures. We argue that the current literature, while showing that elder abuse is a problem with substantial prevalence rates, leaves a number of key questions unaddressed. Differences in conceptualizing and measuring elder abuse hamper the comparison of prevalence rates across different studies and preclude firm answers regarding differences in vulnerability between different groups or over time. By focusing on original research studies published between 2010 and 2016, we seek to ensure

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that our review presents up-to-date figures about the scale of elder abuse, accumulated after the publication of leading family violence textbooks, such as Barnett et al. (2011).

Our review is limited to studies including elders living in their own or their carer's home as opposed to elders living in residential care. The care situation at home is different from the situation in residential care in several respects that may be relevant to the risk of abuse. Elders living at home are in a private environment that is sheltered from outside inspection so that the abuse is less likely to be detected, and they have fewer opportunities for alerting third parties. They are typically involved in an emotional relationship with the carer, who may be their partner or their child, which may create conflicts of loyalty precluding the disclosure of abuse. Moreover, carers looking after elders at home often have to shoulder the burden of care alone, resulting in stress and frustration, which are known risk factors for abusive behavior (Krahé, 2013).

After a brief look at definitions, forms, and measurement of elder abuse, we summarize the findings of recent studies from the international research literature, with a special focus on the variables associated with an increased rate of abuse and the relationship constellations between victim and perpetrator. We evaluate the strengths and limitations of the present database and conclude with an outlook for future research.

Definitions, Forms, and Measurement

Despite variability in the definitions of elder abuse in research and policy (Penhale, 2008), a widely used definition was proposed in 1993 by Action on Elder Abuse³ and subsequently adopted by the World Health Organization (WHO, 2014). According to this definition, "elder abuse is a single or repeated act or lack of appropriate action, occurring within any relationship where there is an expectation of trust which causes harm or distress to an older person" (p. 78).

Whereas the definition offers a broad description of what constitutes abuse, it does not specify the other half of the term, namely who is considered to be an "older person". Defining this term is challenging, as there is no clear-cut criterion for when an individual becomes an elder. A review of European studies demonstrated a large variability in the lower boundary of the category, ranging from 55 to 75 years of age (de Donder et al., 2011). Definitions of "abuse" show less variation and are consistent with other areas of domestic violence, for instance, intimate partner violence. In the elder abuse literature, a common distinction is made between physical, psychological or emotional, sexual, and financial abuse as well as neglect (e.g., WHO & INPEA, 2002). *Physical abuse* refers to the intentional infliction of physical pain or injury on an elderly person, including battering, slapping, or bruising. *Psychological or emotional abuse* describes the causing of mental stress, pain, or anguish by means of verbal and nonverbal activities. Examples are bullying, verbal threats, or infantilizing of the elderly person. *Sexual abuse* refers to sexual activities and sexual attention against the elderly person's will, from unwanted sexual touching to rape. *Financial or material abuse* is defined as exploitation or illegal use of the elders' resources, such as interference with the handling of their own money

³ See <http://elderabuse.org.uk/what-is-elder-abuse/>

or funds, and financial exploitation. *Neglect* refers to withholding the necessary physical, psychological, or medical care from the elderly person, which may be intentional or unintentional.

The definition and theoretical construction of elder abuse have a direct impact on the measurement of elder abuse and the estimated prevalence rates. A large variety of instruments and screening tools have been used to assess whether elders experienced abuse, using different procedures. Instruments include self-reports (e.g., the Conflict Tactics Scales [CTS]) (Straus, 1979), reports by caregivers (e.g., Caregiver Abuse Screen [CASE]) (Reis & Nahmiash, 1995) or physicians (e.g., Elder Abuse Suspicion Index [EASI]) (Yaffe, Wolfson, Lithwick, & Weiss, 2008), screening tools (Hwalek-Sengstock Elder Abuse Screening Test, [HSEAST]) (Neale, Hwalek, Scott, Sengstock, & Stahl, 1991), and instruments developed for clinical settings (e.g., Elder Assessment Instrument [EAI]) (Fulmer, 2008). A comprehensive overview of measures is provided by Abolfathi Momtaz, Hamid, and Ibrahim (2013).

Prevalence of Elder Abuse

We conducted a comprehensive search of published original studies on abuse of elders living at home in the data bases of EBSCO, PsycINFO, Psychology and Behavioral Sciences Collection, and Google Scholar, using the following search terms: elder abuse, elder mistreatment, elder neglect, elder abuse/mistreatment/neglect AND prevalence. Additionally, review articles on elder abuse were checked for relevant articles. Only publications in English were considered for inclusion. Since our purpose was to cover the most recent evidence on the prevalence of elder abuse, the first inclusion criterion was that studies were published from 2010 onwards. The second criterion was the inclusion of community samples of elders, excluding studies with a focus on special groups (e.g., participants with Alzheimer's or a stroke diagnosis). Based on these two criteria, we identified 20 studies on elder abuse from 17 different countries in our specified time frame. One study (Lindert et al., 2013) included independent data sets from seven countries, which were counted separately, bringing the total number of data sets for this review to 26.

The evidence is presented in the following way: Table 1 presents prevalence rates from the 26 samples, grouped by the time periods they covered: the last six months (two samples), the last 12 months (23 samples), and the time since the age of 60 (five samples). Table 2 provides information on study methodology as well as victim and perpetrator characteristics for all studies included in Table 1. As shown in Table 1, the majority of studies examined one-year prevalence rates, reflecting the proportion of respondents who reported abuse experiences in the last 12 months. The overall rates across all forms of abuse ranged from 2.2% in a study from Ireland (Naughton et al., 2012) to 43.7% in a study from Egypt (Abdel Rahman & El Gaafary, 2012). With regard to the different forms of abuse reported for the last 12 months, a wide range of prevalence rates was again demonstrated: Rates of physical abuse ranged between 0.5% (Ireland) (Naughton et al., 2012) and 14.6% (Nigeria) (Cadmus & Owoaje, 2012), rates of psychological or emotional abuse ranged between 1.2% (Ireland) (Naughton et al., 2012) and 41.2% (Thailand) (Chompunud et al., 2010), financial abuse rates ranged between 1.3% (Ireland) (Naughton et al., 2012) and 20.6% (Thailand) (Chompunud et al., 2010), rates of neglect ranged between 0.3% (Ireland) (Naughton et al., 2012) and 42.4% (Egypt) (Abdel Rahman & El Gaafary, 2012), and sexual abuse rates ranged between 0.0% (Thailand) (Chompunud et al., 2010) and 1.5% (Greece)

(Lindert et al., 2013). Additionally, Fulmer, Rodgers, & Pelger (2014) examined verbal abuse of elderly persons and found a prevalence rate of 38%.

Table 2 presents information about the sample composition and measure of elder abuse for each study as well as select findings regarding victim and perpetrator characteristics associated with higher rates of abuse. For the sake of consistency, we only present this information for the overall rates of abuse, except in cases where no overall rates were reported. For a full coverage of all correlates of differing rates of the specific forms of abuse we refer readers to the original studies. An inspection of Table 2 shows that the evidence is far from consistent regarding relevant variables associated with differences in prevalence rates. With regard to gender differences in the vulnerability to victimization, some studies found that rates were higher for women than for men (e.g., Abdel Rahman & El Gaafary, 2012; Kissal & Beşer, 2011), whereas Wu et al. (2012) found that more elderly men than women reported neglect, and yet other studies did not find a gender difference (e.g., Acierno et al., 2010; Burnes et al., 2015). Findings also varied substantially regarding the role of victim's age. Some studies reported higher prevalence rates for older participants (e.g., Chokkanathan, 2014; Gil et al., 2015, for overall abuse), while other studies found that abuse was less prevalent among the older age group (e.g., Cadmus & Owoaje, 2012, for overall abuse; Lindert et al., 2013, for psychological abuse). Other studies did not find a difference among age groups (e.g., Alizadeh-Khoei et al., 2014; Kissal & Beşer, 2011, for overall prevalence rates). Furthermore, studies differed in their findings regarding marital status, education, employment, income, and family related variables (see Table 2). For example, both high income (e.g., Fulmer et al., 2014) and low income (e.g., Acierno et al., 2010, for neglect; Cannell et al., 2014, for sexual abuse) were identified as correlates of higher abuse rates.

Not all studies provided information about the relationship between victim and abuser, but the available evidence showed that elder abuse was mostly committed by family members. However, there was also evidence of abuse by paid caregivers or neighbors. At the same time, the findings differed substantially with respect to the prominence of specific victim-perpetrator constellations. For instance, several studies reported that children were the most common perpetrators (Burnes et al., 2015, for neglect; Cadmus & Owoaje, 2012, for physical abuse, emotional abuse, and neglect; Ergin et al., 2012; Naughton et al., 2012, for overall prevalence rates; Peterson et al., 2014, for financial abuse). Others found that elder abuse was committed primarily by spouses and partners (Amstadter et al., 2011, for physical abuse; Burnes et al., 2015, for physical and emotional abuse; Lai, 2011, for overall prevalence rates). The Turkish study by Kissal and Beşer (2011) found that elders living with their spouse and children reported abuse more frequently than elders living only with their spouse. Yet other studies identified daughters-in-law (Abdel Rahman & El Gaafary, 2012, for overall prevalence rates) and other relatives (Amstadter et al., 2011, for neglect; Beach et al., 2010, for physical abuse of elders in African American families; Gil et al., 2015, for overall prevalence rates) as most common abusers. Only one study identified non-family members, namely neighbors, as most common perpetrators of financial abuse (Cadmus & Owoaje, 2012).

Table 1

Summary of Prevalence Rates in Percent

Country	Author(s), year	Overall	Physical	Psychological/ Emotional	Financial	Neglect	Sexual	Other form
Prevalence in the last 6 months								
Turkey	Kissal & Beşer (2011)	13.3	4.2	9.4	2.1	8.2	0.9	-
U.S.	Beach, Schulz, Castle, & Rosen (2010)	-	-	African American: 16.1 Non-African American: 7.2	African American: 12.9 Non-African American: 2.4	-	-	-
Prevalence in the last 12 months								
Africa								
Egypt	Abdel Rahman & El Gaafary (2012)	43.7	5.7	5.1	3.8	42.4	-	-
Nigeria	Cadmus & Owoaje (2012)	30.0	14.6	11.1	13.1	1.2	0.04	-
Asia								
China	Wu et al. (2012)	36.2	4.9	27.3	2.0	15.8	-	-
India	Chokkanathan (2014)	21.0	12.3	19.2	12.7	12.4	-	-
Iran	Alizadeh-Khoei, Sharifi, Hossain, Fakhrzadeh, & Salimi (2014)	14.7	10.3	3.0	3.0	9.0	-	-
Thailand	Chompunud et al. (2010)	14.6	2.9	41.2	20.6	2.9	0.0	-
Europe								
Germany	Lindert et al. (2013)	30.4 (excl. neglect)	3.3	27.1	3.6	1.8	0.9	-
Greece	Lindert et al. (2013)	15.7 (excl. neglect)	3.4	13.2	4.0	2.8	1.5	-
Ireland	Naughton et al. (2012)	2.2	0.5	1.2	1.3	0.3	0.05	Interpersonal abuse (physical, psychological and sexual abuse): 1.3
Italy	Lindert et al. (2013)	12.7 (excl. neglect)	1.0	10.4	2.7	1.0	0.5	-
Lithuania	Lindert et al. (2013)	26.2 (excl. neglect)	3.8	24.4	2.8	0.6	0.3	-

Table 1

Summary of Prevalence Rates in Percent (continued)

Country	Author(s), year	Overall	Physical	Psychological/		Financial	Neglect	Sexual	Other form
				Emotional					
Portugal	Gil et al. (2015)	15.0	2.3	6.3	6.3	0.4	0.2	-	
	Lindert et al. (2013)	27.6 (excl. neglect)	2.1	21.9	7.8	3.7	1.3	-	
Spain	Lindert et al. (2013)	14.5 (excl. neglect)	1.4	11.5	4.8	0.9	0.3	-	
Sweden	Lindert et al. (2013)	30.8 (excl. neglect)	4.0	29.7	1.8	1.3	0.5	-	
Turkey	Ergin et al. (2012)	14.2	2.9	8.1	3.5	7.6	0.4	-	
North America									
Canada	Lai (2011)	4.5	-	-	-	-	-	-	
U.S.	Acierno et al. (2010)	11.4	1.6	4.6	5.2	5.1	0.6	-	
	Amstadter et al. (2011)	-	1.8	5.1	-	-	0.3	-	
	Burnes et al. (2015)	4.6	1.8	1.9	-	1.8	-	-	
	Cannell, Manini, Spence-Almaguer, Maldonado-Molina, & Andresen (2014)	-	-	-	-	-	0.9	-	
	Fulmer et al. (2014)	-	-	-	-	-	-	-	Verbal: 38%
	Peterson et al. (2014)	-	-	-	2.7	-	-	-	
Prevalence since the age of 60									
U.S.	Acierno et al. (2010)	-	1.8	13.5	-	-	0.3	-	
	Amstadter et al. (2011)	-	2.1	12.9	6.6	5.4	0.3	-	
	Beach et al. (2010)	-	-	African American: 24.4 Non-African American: 13.2	African American: 23.0 Non-African American: 8.4	-	-	-	
	Dong (2014)	13.9-25.8 (depending on cutoff)	1.1	1.1-9.8	8.8-9.3	4.6-11.1	0.2	-	
	Peterson et al. (2014)	-	-	-	4.7	-	-	-	

Table 2

Study Methodology and Victim and Perpetrator Characteristics

Country	Author(s), year	Sample (N, age in years)	Instruments to assess abuse	Age from	Characteristics of victims	Characteristics of perpetrators
Africa						
<i>Egypt</i>	Abdel Rahman & El Gaafary (2012)	N=1,106 m: n=518 $M_m=67.6$, $SD_m=6.3$ $M_f=68.5$, $SD_f=8.4$	Actual abuse tool Questionnaire to elicit elder abuse EAI Risk of abuse tool	60+	<i>Overall abuse:</i> Higher rates related to: being female, age ≥ 70 years, non-married, non- working, insufficient retirement pay, psychological illness, physical illness, dependence on others, 1-2 siblings <i>Overall abuse:</i> Higher rates related to: age between 60-69 years, non-married, living alone, unemployed, financially dependent, functional impairment, urban area	<i>Overall abuse:</i> 70.0% daughter- in-law 59.1% child 28.0% spouse Higher rates related to: younger age, illiterate, married, non-working <i>Children:</i> 43.7% physical abuse 40.5% emotional abuse 83.3% neglect <i>Neighbors/co-</i> <i>tenants:</i> 47.6% financial abuse
<i>Nigeria</i>	Cadmus & Owoaje (2012)	N _f =404 $M=70.3$, $SD=8.9$	Adapted WHO instrument	60+		
Asia						
<i>China</i>	Wu et al. (2012)	N=2,000 m: n=801 $M=68.8$, $SD=6.6$	Adapted version of HSEAST, VASS	60+	<i>Overall abuse:</i> Higher rates related to: being non-married, living alone, labor intensive job, only self-made income as living source, ≤ 5 years of school education, chronic disease, physical disability, depression	-
<i>India</i>	Chokkanath an (2014)	N=897 m: n=425	Adapted version of CTS	61+	<i>Overall abuse:</i> Higher rates related to: being female, age ≥ 71 years, unemployed, low assets, high dependence on carers, having physically abused family members, greater family conflicts, low family cohesion	<i>Overall abuse:</i> Higher rates related to: younger age, little education, alcohol consumption, abuse of other family members, higher number of care recipients
<i>Iran</i>	Alizadeh- Khoei et al. (2014)	N=300 m: n=140 $M=68.73$, $SD=6.65$	Adapted version of HSEAST	60+	<i>Overall abuse:</i> Higher rates related to: being female, low education, financial dependence on children	-

Table 2

Study Methodology and Victim and Perpetrator Characteristics (Continued)

Country	Author(s), year	Sample (N, age in years)	Instruments to assess abuse	Age from	Characteristics of victims	Characteristics of perpetrators
<i>Thailand</i>	Chompunud et al. (2010)	N=233 m: n=62 M=69.71	Self- constructed	60+	<i>Overall abuse:</i> Higher rates related to: being female, low income, high family dependency, poor perception of health, thinking that one's health is worse compared to other old persons, family mental health problems, bad family relationships	-
Europe						
<i>Germany, Greece, Italy, Lithuania, Portugal, Spain, Sweden</i>	Lindert et al. (2013)	N=4,467 m: n=1,908	Adapted version of revised CTS	60+	<i>Overall abuse:</i> Higher rates related to: living in Germany, Lithuania, Portugal, Sweden, not owning a house, (low) blue collar Lower rates related to: age 75-80 years, primary school education, no financial strain	-
<i>Ireland</i>	Naughton et al. (2012)	N=2,021 m: 45% M=74. SD=6.6	CTS for physical, psychological, and sexual abuse Adapted items for financial abuse and neglect from UK and New York prevalence studies	65+	<i>Overall abuse:</i> Higher rates related to: low income, physical or mental health below the average, poor social support	<i>Overall abuse:</i> 50% child 24% other relative 20% spouse/partner 4% friend 2% health care worker
<i>Portugal</i>	Gil et al. (2015)	N=1,123 m: n=373	Self- constructed	60+	<i>Overall abuse:</i> Higher rates related to: being female, age \geq 80 years, living alone, no schooling, long-term illness, depressive symptoms, dependence on others	<i>Overall abuse:</i> 27% other relative (e.g., brother, nephew) 13.5% (ex)spouse/partner 13.5% refuse to identify 11.6% friend/neighbor 11.1% son/stepson 10.3% multiple perpetrators 5.5% paid professional 5.0% daughter / stepdaughter 2.0% male grandchild 0.5% daughter and son-in-law

Table 2

Study Methodology and Victim and Perpetrator Characteristics (Continued)

Country	Author(s), year	Sample (N, age in years)	Instruments to assess abuse	Age from	Characteristics of victims	Characteristics of perpetrators
<i>Turkey</i>	Ergin et al. (2012)	N=756 m: n=389 M=70.84, SD=6.50	Self- constructed	65+	<i>Any abuse:</i> Higher rates related to: lower satisfaction with life	<i>Overall abuse:</i> 68.1% child 12.9% spouse 9.5% sibling
	Kissal & Beşer (2011)	N=331 m: n=143 M=72.5, SD=5.6	Self- constructed	65+	<i>Overall abuse:</i> Higher rates related to: being female, living with spouse and children, low education, average /below average family relationships	-
North America						
<i>Canada</i>	Lai (2011)	N=2,272 Chinese	Self- constructed	55+	<i>Overall abuse:</i> Higher rates related to: lower financial means, low level of education, more chronic illness, poorer physical and mental health, higher barriers for access to health services, lower social support, no religion, more negative attitude toward aging	<i>Overall abuse:</i> 40.2% spouse 18.6% son 11.8% daughter 8.8% daughter-in- law 3.9% son-in-law 3.9% grandchild
<i>USA</i>	Acierno et al. (2010)	N=5,777 m: n=2,300 M=71.5, SD=8.1	Self- constructed	60+	<i>Physical abuse:</i> Higher rates related to: lower age (< 70 years), low social support <i>Emotional abuse:</i> Higher rates related to: lower age (< 70 years), employment, low social support, dependence on others, prior traumatic event <i>Financial abuse:</i> Higher rates related to: dependence on others, non-use of social services <i>Neglect:</i> Higher rates related to: minority racial status, low income, low social support, low health status <i>Sexual abuse:</i> Higher rates related to: low social support, prior traumatic event	-

Table 2

Study Methodology and Victim and Perpetrator Characteristics (Continued)

Country	Author(s), year	Sample (N, age in years)	Instruments to assess abuse	Age from	Characteristics of victims	Characteristics of perpetrators
USA	Amstadter et al. (2011)	N=902 m: n=361 M=71, SD=8	Self- constructed	60+	<p><i>Physical abuse:</i> Higher rates related to: low social support, dependence on others, prior traumatic event</p> <p><i>Emotional abuse:</i> Higher rates related to: non-White ethnicity, low income (\leq \$35,000), poor health status, low social support, dependence on others, prior traumatic event, use of social services</p> <p><i>Financial abuse:</i> Higher rates related to: non-White ethnicity, poor health status, low social support, dependence on others</p> <p><i>Neglect:</i> Higher rates related to: being female, older age (\geq 71), non-White ethnicity, low income (\leq \$35,000), poor health status, low social support, use of social services</p>	<p><i>Physical abuse:</i> 36% partner 30% other family member 7% stranger</p> <p><i>Emotional abuse:</i> 68% other relative/ acquaintance 18% romantic partner 14% stranger</p> <p><i>Neglect:</i> 52% other family member 26% acquaintance 22% (ex-)partner</p>
	Beach et al. (2010)	N=903 n non-African American= 693 n African American=210 m: n=241 M=72.5, SD=8.1	Psychological abuse: modified CTS Financial abuse: adapted items	60+	<p><i>Psychological and financial abuse since age 60 and past 6 months:</i> Higher rates related to: African American ethnicity, risk for depression</p>	<p>African American: Different forms of physical abuse mostly perpetrated by other family member (non-spouse, non-child) and other trusted person. Non-African American: Different forms of physical abuse, mostly perpetrated by spouse, other family member, other trusted person, and son.</p>

Table 2

Study Methodology and Victim and Perpetrator Characteristics (Continued)

Country	Author(s), year	Sample (N, age in years)	Instruments to assess abuse	Age from	Characteristics of victims	Characteristics of perpetrators
USA	Burnes et al. (2015)	N=4,156 m: n=1,476 M=74.1, SD=8.7	Adapted versions of CTS for physical and emotional abuse OARS scale for neglect	60+	<p><i>Physical abuse:</i> Higher rates related to: being separated or divorced Lower rates related to: middle old age (70-84 years), living with spouse/partner, less educated, greater functional capacity, living in a suburban area</p> <p><i>Emotional abuse:</i> Higher rates related to: being separated or divorced Lower rates related to: age ≥ 85 years, living with spouse or partner, greater functional capacity, living in a suburban area</p> <p><i>Neglect:</i> Higher rates related to: being separated or divorced, other ethnicity than Caucasian, poverty, poor health status Lower rates related to: age ≥ 70 years</p>	Physical abuse: 36.8% spouse/partner Emotional abuse: 31.2% spouse/partner 29.9% child Neglect: 29.9% child 28.0% home carer
	Cannell et al. (2014)	N=24,343	Black et al., 2011: National Center for Injury and Violence Prevention and Control, Centers for Disease Control and Prevention.	60+	<p><i>Sexual abuse:</i> Higher rates related to: other race (non-Hispanic) compared to White (non- Hispanic), women who do binge drinking, non- married, employed or unemployed compared to retired, missing income/income < \$15,000, poor mental health, dissatisfaction with life, lack of emotional support</p>	-

Table 2

Study Methodology and Victim and Perpetrator Characteristics (Continued)

Country	Author(s), year	Sample (N, age in years)	Instruments to assess abuse	Age from	Characteristics of victims	Characteristics of perpetrators
USA	Dong (2014)	N=3,159 U.S. Chinese m: 41.1%	(Modified) CTS for physical and psychological abuse Self- constructed item for sexual abuse Assessment of financial abuse and neglect Different criteria for abuse varying in restrictiveness	60+	<i>Overall abuse:</i> Higher rates related to: older age, higher education, poor health, poor quality of life	-
	Fulmer et al. (2014)	N=142 m: 40% M=74.88, SD=6.98	CTS	65+	<i>Verbal abuse:</i> Higher rates related to: high level of income and education	-
	Peterson et al. (2014)	N=4,156 m: 35.5% M=74.7, SD=8.6	Self- constructed	60+	<i>Financial abuse</i> Higher rates related to: ethnicity (African American), marital status (separated, never married, divorced, refused), living with spouse/partner, those who lived without spouse: ≥ 3 non-spousal household members, not owning a home, income below poverty, household income < \$15,000, low education (< high school), poor/very poor health, higher need of medication, living in a urban area, especially New York City	<i>Financial abuse:</i> 24.6% child 16.9% friend/neighbor 14.9% paid carer 14.3% other relative 10.8% grandchild 7.7% spouse/partner 6.2% other non- relative 4.1% daughter/ son-in-law 4.1% unknown

Note: f = female; m = male; CTS = Conflict Tactics Scales; EAI = Elder Assessment Instrument; HSEAST = Hwalek-Sengstock Elder Abuse Screening Test; OARS = Duke Older Americans Resources and Services; VASS = Vulnerability to Abuse Screening Scale; WHO = World Health Organization.

Evaluation of the Evidence

As shown in Table 1, prevalence rates for elder abuse varied substantially between studies and countries. There are a number of conceptual and methodological reasons for this variability. First, we noted a lack of consensus on the definition of elder abuse. Not all studies explicitly defined elder abuse and those that did differed between the definition by the World

Health Organization (WHO, 2014), the National Research Council (Bonnie & Wallace, 2003), or the National Center on Elder Abuse⁴. Moreover, as revealed by Table 2, a large variability was found in the measurement of elder abuse. Some studies used established instruments, such as the CTS or the HSEAST (e.g., Chokkanathan, 2014; Wu et al., 2012), but many used self-constructed items (e.g., Gil et al., 2015; Lai, 2011), which raises the issue of validity (an exception is the study by Chompunud et al. (2010), who assessed the content validity of their measure). Additionally, the instruments differed greatly in their level of detail and number of items, which had a direct impact on the detection of abuse.

A wide heterogeneity was also found in sampling methods and sample sizes. Only few studies were based on nationally representative samples (e.g., Acierno et al., 2010; Naughton et al., 2012), and sample sizes varied from small-scale samples with just over a hundred participants (Fulmer et al., 2014) to large-scale samples including nearly six thousand participants (Acierno et al., 2010). For the studies with small samples in particular, it is not clear how representative they are. The fact that studies differed in the lower age limit for inclusion in the sample also contributes to the wide range in prevalence rates. The lower age limits varied between 55 years (Lai, 2011) and 65 years (Ergin et al., 2012; Fulmer et al., 2014; Kissal & Beşer, 2011; Naughton et al., 2012) in the present group of studies, with the majority including participants from the age of 60 years upwards. The reference period for abuse experiences also varied between the studies. Although most studies asked about abuse in the last 12 months, two referred to the last six months (Beach et al., 2010; Kissal & Beşer, 2011), and five to the period since the age of 60 (Acierno et al., 2010; Amstadter et al., 2011; Beach et al., 2010; Dong, 2014; Peterson et al., 2014). Thus, the obtained prevalence rates are based on different time frames. All these definitional and methodological differences between studies contributed to the observed range in the prevalence rates and hamper comparisons and generalizations across studies.

Finally, our review also showed an imbalanced distribution of studies across countries, with the large majority of studies conducted in the U.S., followed by other Western countries. Only one study (Lindert et al., 2013) included data sets from several countries using a unified methodology. Thus, little is known about how cultural variables, such as attitudes toward the elderly, impact the prevalence of elder abuse.

Conclusion and Directions for Future Research

The purpose of the present article was to provide an overview of the current body of knowledge in the international literature on the prevalence of abuse among elders living at home. The review has shown that elder abuse is a problem in many countries and is predominantly perpetrated by family members, who typically carry the main burden of caring for elderly relatives. However, the overall prevalence rates and rates for subtypes of abuse differed substantially, not only between countries but also between studies from the same country. The extent to which this variability reflects differences in the actual prevalence of elder abuse is impossible to determine at this point due to a lack of conceptual and methodological consistency. Future research should address these limitations and seek a consensus on the definition and operationalization of elder abuse. First, widely shared and accepted definitions of the key concepts of “abuse” and “elder” are required, the latter considering not only age,

⁴ See <http://www.ncea.aoa.gov/faq/index.aspx>

but also the degree of impairment of autonomy and dependency on others. Second, reliable and valid instruments are needed to yield prevalence rates which can be compared across studies and facilitate the exploration of cultural factors associated with differences of the prevalence of elder abuse.

In addition to gaining a clearer picture of the prevalence of elder abuse, there are important tasks on the research agenda of this field that were beyond the scope of the present review (see Mosqueda & Olsen, 2015, for an overview). One such task is the analysis of vulnerability factors, such as ill physical and mental health, that reduce the autonomy of elderly persons and put them at higher risk of suffering abuse. A second task is the identification of risk factors on the perpetrator side, such as mental health problems or substance abuse, as well as contextual risk factors, such as elders' lack of social contacts outside the home or caregiver stress. Such studies should adopt prospective designs to be able to identify predictors of elder abuse prior to the abuse experience. In combination, a better understanding of the risk and vulnerability factors is critical for the prevention and early detection of elder abuse. Third, more evidence is needed about the consequences of elder abuse. A growing literature has demonstrated severe adverse effects of abuse on elderly victims' physical health and mortality, mental health, social functioning, and quality of life in general (see Dong, 2015, for a summary). Finally, cultural variables, most notably related to the social construction of family relationships, need to be studied in their impact on elder abuse to identify both risk and protective factors. Although the focus of this review was on elders living at home, abuse is also an issue in residential facilities for the elderly (Castle, Ferguson-Rome, & Teresi, 2015). Vulnerable persons at the end of their life, with limited possibilities to protect themselves or secure help from third parties, need special protection. Systematic research on elder abuse has a critical role to play in enabling societies to address these needs.

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