



# Interpersonal Violence: a Review of Elder Abuse

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## Abstract

**Purpose** We review the underappreciated problem of elder abuse with a focus on what trauma surgeons need to know. Because of its prevalence, it is important that clinicians understand types of elder abuse, risk factors in patient and perpetrator, prevention strategies, and the appropriate referral and treatment of potential victims of elder abuse.

**Recent Findings** Elder abuse affects at least 10% of older individuals in the USA. Despite much effort to address the problem via legal and societal approaches, data to support particular programs are poor. And even with extensive efforts, the utility of established prevention strategies or existing screening tools to identify victims of elder abuse in the acute care setting has yet to be established.

**Summary** Elder abuse is a public health problem. As a society, we have only begun to define the extent of the problem. Healthcare systems have failed to effectively prevent or to accurately screen for, diagnose, and report elder abuse. The next steps include broader public awareness, educational initiatives, improved screening tools, and effective intervention strategies. In the meantime, we as trauma surgeons can be more diligent in reporting.

**Keywords** Elder abuse · Elder mistreatment · Neglect · Geriatric trauma

## Introduction

### History

First documented by the medical literature as “granny battering” in a 1975 article by Dr. Alex Baker, elder abuse is a global problem, long pre-dating this piece [1]. In the 1970s, when more attention was being paid to child abuse, there was a sense that elder abuse was being relatively ignored [2]. This problem continues today, and unfortunately, as trauma surgeons, we too often see the results of elder abuse with missed opportunities to prevent, identify, or effectively intervene [3].

Since the 1970s, many changes, primarily within the legal system, have established elder abuse as a problem. In 1974, congress amended the Social Security Act, establishing adult protective services (APS). By 1981, every state had their own APS program [4]. The National Center on Elder Abuse

(NCEA), established in 1988, carries the mission “to improve the national response to elder abuse, neglect, and exploitation by gathering, housing, disseminating, and stimulating innovative, validated methods of practice, education, research, and policy” [5]. In 2002, congress began introducing legislation to address elder abuse including the Elder Justice Act (2009) and the Elder Abuse Prevention and Prosecution Act (2017) which detail the social services and criminal justice provisions, respectively [6]. This paved the way for diagnosing and protecting some of our most vulnerable patients from elder abuse.

While legal and policy solutions have begun to be identified and implemented, there is still a dearth of research on the scope of the problem or on effective solutions. During encounters with elderly patients through the trauma system, we have an opportunity to identify and stop elder abuse. However, this is a difficult field of study, and research is limited on early identification and optimal assessment of elderly victims of abuse.

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## Definition

There are many different definitions of elder abuse that have evolved over time. In 2016, the Centers for Disease Control and Prevention (CDC) published guidelines for research

utilization and defined elder abuse as “an intentional act or failure to act by a caregiver or another person in a relationship involving an expectation of trust that causes or creates a serious risk of harm to an older adult”. This definition has many parts which we will explore to fully understand its meaning. “Intentional” when describing an act or a failure to act is something that was done knowingly or on purpose. “Caregiver” includes persons with whom there is an expectation of trust. A “relationship involving an expectation of trust” includes any relationship within which there is a social, cultural, or legal assumption of protection. Interestingly, this excludes strangers or estranged relatives as there is not an expectation of trust with those persons. Simply, “harm” is a negative effect to a person’s well-being. This may be multifactorial and will be further broken down below into the various types of abuse. An “older adult” per the CDC definition includes all persons over 60 years of age [7].

## Prevalence

In 2018, 72.8 million Americans were over the age of 60, representing approximately 22% of the population [8]. The prevalence of elder abuse in the USA is estimated to be 10%, although studies vary widely [9]. The estimated pooled prevalence worldwide is similar, ranging from 10 to 15% [10, 11•]. This is widely considered to be an underestimate. In fact, when reporting is by third parties, the prevalence increases three-fold to 34% [10].

## Risk Factors and Diagnosis

Similar to other forms of interpersonal abuse, the diagnosis of elder abuse may be challenging. Although we may imagine the prototype of an isolated older person living with a family member or in a care facility, being brought into the emergency department with facial ecchymosis and multiple fractures, these patients are not the majority of victims of elder abuse. Therefore, diagnosis is rarely this apparent. Identifying known risk factors is important, especially if these characteristics result in adding elder abuse to the differential. Risk factors can be divided into patient risk factors and perpetrator risk factors.

## Patient

The World Health Organization (WHO) described risk factors of the victims of elder abuse in their 2015 report on aging and health. Factors most strongly associated include dependence, poor physical health, mental disorder, low socioeconomic status, cognitive impairment, and social isolation. Other risk factors include being female, older than 74, and financially dependent [12]. Other potential risk factors include military veterans and lesbian/gay/bisexual and transgender individuals.

Further research is needed to characterize these additional high-risk groups, definitively [13].

Another potential risk factor is frailty. Frailty has recently received a lot of attention as a predisposing condition for various health problems in the elderly [14]. When evaluating elder abuse, frailty has demonstrated conflicting results. Two studies performed in Mexico and Brazil demonstrated that frail elders were over two times more likely to experience abuse [15, 16]. However, another Mexico-based study found, after adjustment, no association between frailty and mistreatment [17]. We suspect frailty predisposes to elder abuse. However, further research must further elucidate its exact role. Validated screening tools are needed to identify victims of elder abuse. A systematic review in 2017 identified eleven studies that examined screening tools for elder abuse. They concluded that some tools had potential but were unable to recommend a single tool [18]. A more recent review (2020) of five screening tools also failed to establish a recommended screening tool. They utilized multiple focus groups and found the screening tools too difficult to properly administer. The review concluded that a screening tool must be concise, easy to use, and appropriate for the vulnerable population [19].

## Perpetrator

The WHO similarly described strong risk factors for perpetrators of elder abuse. These include mental health issues in the perpetrator, most notably depression and substance abuse, as well as financial, emotional, and/or relational dependence on the victim [12]. Identifying individuals caring for the elderly with these risk factors may increase our ability to identify those at increased risk. In addition, elderly individuals may underreport abuse because they fear retribution and/or isolation if the abuse is identified.

In 2019, an innovative study attempted to validate a measure of abuser risk. Although more research is needed, this innovative study concluded that a questionnaire administered to the patient about the caregiver in question could be useful in identifying abusers. Victims were asked about the potential perpetrator’s history with jobs, the law, abuse, and personality and their dependence on the possible victim. While the 9-question and 21-question forms are a bit tedious and may be difficult to perform, they present an important area for the identification and diagnosis of elder abuse [20].

## Types of Elder Abuse

Different types of elder abuse have been described (Table 1). These include (in decreasing order of reported frequency) emotional/psychological, financial, neglect, physical, and sexual abuse [10, 11•]. Definitions and examples of these types of abuse are presented (Table 1).

**Table 1** Types of elder abuse

Type of abuse	Definition	Examples
Emotional/psychological	Willful verbal or non-verbal behavior that mentally affects the individual as perpetrated by a person of trust	Humiliation, threats, coercion, isolation, and intimidation
Financial	Purposeful improper utilization of the individual's resources by a person of trust	Taking money or property, forgery, and other utilization of assets
Neglect	Failure of a person of trust to fulfill care-taking responsibilities	Failure of meeting needs for medical care, nutrition, clothing, and shelter
Physical	Intentional use of force by a person of trust causing injury, illness, or death	Physical acts of violence with or without a weapon
Sexual	Non-consensual sexual interaction with a person of trust	Any forced or unwanted contact of the victim with self, another person, or an object, photography, or harassment

References: [7, 21]

## Effects of Elder Abuse

The consequences of elder abuse are not well-studied. Some preliminary data are reviewed here.

Physical and sexual abuse have physical consequences based on the severity and specifics of the abuse. A study from Chicago found increased mortality in victims of elder abuse compared to elders not subjected to mistreatment [22]. Increased risk of new diseases, including sexually transmitted diseases, has been reported [5]. The psychological toll of elder abuse takes many forms, most notably, depression, anxiety, and PTSD. Small studies demonstrate significantly increased rates of mental health disorders among elder abuse victims [23]. The financial burden of elder abuse is substantial, with financial exploitation estimated to cost nearly 3 billion dollars a year [5]. Although it is difficult to estimate the costs of medical care, violent injuries to elders in the USA are estimated to cost over 5 billion dollars annually [24]. These numbers likely underestimate the fiscal consequences of elder abuse. With the high prevalence of elder abuse and our growing elderly population, the long-term consequences of elder abuse need further study.

## Special Populations

Many elderly individuals are vulnerable in some way. However, certain subsets of elderly individuals are particularly vulnerable to abuse. These elders are usually dependent on others due to physical or cognitive afflictions. Below we explore a couple of these populations.

### Cognitively Impaired

An estimated 5.8 million Americans over the age of 65 have Alzheimer's dementia, a number that is expected to double by 2040 [25]. Cognitively impaired elders are particularly at risk

of abuse because they are increasingly dependent on others and socially isolated. Because of their decreased ability to communicate, they may be unable to accurately detect or report their own abuse [26]. Reported rates of elder abuse in people with dementia vary, ranging from less than 1 to 78% in the community and 8 to 78% in institutionalized settings [27]. There are biases inherent in reporting in this population. In a study in Japan, individuals viewed the same abusive behaviors in cognitively impaired older people as less abusive than in the cognitively unimpaired [27]. While it is apparent that those with dementia are at increased risk of elder abuse, prevention and intervention are difficult. Caring for patients with dementia increases burnout in both community and professional caregivers [28, 29]. Identified areas for potential progress would be decreasing caregiver burnout and building improved relationship and rapport between caregivers and patients [30].

### Institutionalized

Elderly persons are admitted to chronic care and nursing home facilities for both physical and mental reasons. Of note, over 50% of dementia patients are institutionalized [25]. Abuse can be reported by the victim (self-reporting) or by staff. Data are limited regarding self-reporting of abuse. A recent meta-analysis reported that 64% of staff reported witnessing abuse within the past year. This is a shockingly high number, especially given the known underreporting [31]. Additionally, there are different schemes of harm in facilities. The abuse can be staff to resident, but there is also resident to resident mistreatment. Resident to resident can be difficult to measure, but it is estimated at around 20% of all nursing home residents [30]. Resident to resident mistreatment may not classify technically as elder abuse since there is no expectation of trust among residents. However, when staff, with whom an expectation of trust exists, fail to prevent or recognize this mistreatment, this constitutes elder abuse. Decreasing resident to

resident mistreatment centers around detecting early warning signs, de-escalating incidents, and improving the environment. Decreasing staff to resident mistreatment, as with dementia patients discussed above, involves improved oversight and education to decrease caregiver stress and improve relationships with patients [31].

## Our Role as Healthcare Providers

Frequently, we, as healthcare providers, do not become aware of elder abuse until late in the game when elders present to us with injury. As healthcare professionals, we share responsibility to identify warning signs sooner in primary care settings and to advocate for prevention. In trauma, we need to be attuned to the prevalence of elder abuse, as any interactions with the healthcare setting may be an opportunity to identify and intervene. One big roadblock we face is the lack of standardization of defining and reporting elder abuse. This limitation makes diagnosis and thus treatment and prevention difficult, but does not change our mandate to attempt to protect our patients.

It is a well-accepted statistic that the USA spends more on healthcare than any other country in the world, yet our outcomes do not reflect this [32]. We spend a significant amount of this money at the end of life, but in proportion, we offer limited support services to elders and caregivers outside of the acute care setting [33]. While a lot of these changes and long-term advancements must come from policy changes, there are areas within our control for improvement. While there are no data to support particular trainings, there are a number of publicly available resources from the NCEA and others that offer guidance on advocating for patients who may be victims of abuse [34, 35, 36].

## Identification

We need to become better at identifying elder abuse and empowering elders to report their own abuse. Many are scared to report because they do not want to leave their current situation and/or are scared of retribution. Interviews done with healthcare workers found reported reasons for lack of detection include lack of overall knowledge about elder abuse and information about its perpetrators [37]. As healthcare workers, the onus is on us to educate ourselves and identify those we feel are at risk and victims of abuse. In the long-term care setting, some clues include skin wounds, poor hygiene, and dirty clothes. In outpatient centers, missed visits, lack of adherence to health guidelines, and poor control of chronic diseases should raise concern. For patients evaluated in the emergency department, signs of abuse include those noted above for both nursing home and outpatient settings. In addition, injury patterns may also suggest abuse [33].

For the trauma surgeon in particular, a recent scoping review identified common mechanism of trauma, clinical considerations, and radiologic findings associated with physical abuse. High-risk trauma mechanisms included falls and trauma perpetrated with body parts rather than a weapon. Clinical and radiologic patterns of injury included periorbital fractures, distal ulnar fractures (suggesting defense), contusions around the axilla and inner arm, more than one bruise, bruising incompatible with the reported mechanism, other discordance between history and physical findings, and an intoxicated patient [3]. Unfortunately, these injuries are too common in many trauma patients, and utilizing these findings as the sole screening tool would flag nearly all elderly trauma patients. Therefore, incorporation of another screening tool would be valuable.

As previously discussed, there is no conclusive recommendation for any screening tool. However, if the patient is cognitively intact, a tool such as the Elder Abuse Suspicion Index (EASI) may be helpful. This tool asks the patient 5 questions about their home setting: do they rely on someone for help with their activities of daily living, have people prevented them from getting food or other essential items or from being with people they wanted to be with, have they been upset because of being talked to in a way that made them feel shamed or threatened, have they been forced to sign financial papers against their will, and has anyone made them afraid or touched them in ways they did not want. It then asks the provider one question about if they identify any of the signs associated with elder abuse such as poor eye contact, poor hygiene, or medication non-compliance. Given its brevity and ease of use, it may be easily administered in the acute care setting [38].

## Prevention

A public health approach to preventing abuse consists of surveillance to discover the extent of the problem, identification of risk factors, development and evaluation of interventions, and implementation [30]. Although limited, there are some data on prevalence from population-based studies. Limitations of these studies are lack of consistent definitions and reporting biases. We have also begun to identify risk factors associated with the elder abuse. However, data linking risk factors to elder abuse are limited. Our next steps are intervention strategies and implementation of these interventions.

## Intervention

While prevention is the ultimate goal to address elder abuse, until we succeed, interventions are necessary to mitigate and treat the effects of abuse. In 2016, a Cochrane review was published investigating the available data on intervention programs. The authors evaluated seven studies, the majority of

which were classified as having low and very low quality of evidence. They concluded the available evidence were inadequate making implications for practice minimal. They did, however, identify educational interventions as an important area for future research [39]. A larger (115 studies) and more recent (2019) review of available programs similarly found the majority of available data to be of low quality. They reported two studies as having higher quality which we review below. Additionally, they found few programs, only 13%, integrated an acute care hospital, and recommending devoting resources to developing interventions there given their resource dense and multidisciplinary environment [40].

One of these studies reported to have higher quality evidence is the START program (STrategies for RelaTives), a UK-based randomized controlled trial, which randomly assigned caregivers to a manual-based coping intervention. They found improved anxiety and depression among caregivers, but no change in rates of abusive behavior. They also noted frequent intervention outside of the START program for ethical reasons which could have impacted these results [41]. Of note, the Cochrane review included this START program and reported the quality of evidence as low [39]. The second, a pilot study, utilized the PROTECT intervention (PRoviding Options To Elderly Clients Together). This study included only elderly women already referred to the New York Elder Crime Victim Center and they were randomized to receive resolution services with a community health referral or resolution services with PROTECT therapy. The PROTECT intervention was a type of problem-solving therapy designed to educate on and resolve depressive and anxiety symptoms. While 68% of women in the intervention arm perceived improvement in their abuse status and 50% in the control group, the result was not statistically significant [42].

Although no formal recommendation can be made regarding implementation of an intervention to decrease elder abuse, the data available suggest potential areas of focus for future tools. We speculate that ideal interventions would likely involve intervening at multiple levels of care: the home, care centers, and the hospital and with different individuals, the caregiver, and the victim. Additionally, these interventions should focus on educational and multidisciplinary initiatives.

## Reporting

Laws of reporting elder abuse are state dependent. Older studies of nurses found a large majority had seen evidence of elder abuse; however, less than half reported it [33]. In interviews with healthcare workers, reasons for lack of reporting varied based on different kinds of providers. Nurses felt elder abuse was uncommon and did not think it was their job to report. Physicians noted concern for maintaining trust, limited time, and other care issues taking priority as reasons for not reporting elder abuse [37]. Overall, these interviews

highlighted a strong need for improved education on elder abuse detection and reporting [37].

Emergency providers are much more likely to diagnose child abuse than elder abuse, even though they have similar estimated prevalence [43]. This is a failure of identification of the problem. Additionally, education among the emergency and trauma teams improves reporting rates of child abuse [44]. Utilizing education initiatives and other lessons learned from child abuse would likely improve reporting rates of elder abuse. As trauma surgeons, we frequently are limited by more pressing medical concerns. However, after stabilization of the patient and prior to discharge, we should report all suspected abuse for further evaluation.

All states have statutes regarding mandatory reporting for elder abuse. In some states, everyone must report any suspected elder abuse. In other states, limitations on the scope of who needs report or what should be reported exist. There are also variations on what characteristics the victim must have to be eligible for reporting [45, 46]. For example, in our state, New Jersey, the individuals required to report vary based on whether the victim is institutionalized, a resident of a healthcare facility or boarding house, or a vulnerable adult. However physicians are included as mandatory reporters for all three categories. Additionally, a victim must fit into one of these categories to be eligible for reporting to APS [47]. We posit that, like with child abuse, we should report any suspected abuse regardless of the legal mandate. The NCEA maintains a repository of state-specific contact information for reporting and also staffs a hotline to provide further information [48, 49].

## Conclusion

Elder abuse is an underappreciated problem with many areas for improvement in prevention, identification, and treatment. Unfortunately, many elderly patients, especially in the setting of acute trauma, present with signs and symptoms that make the diagnosis of elder abuse difficult. Therefore, it is essential for us to have a high index of suspicion in every patient encounter so as to not miss opportunities to intervene early. As trauma surgeons, we evaluate many elderly patients. Further research in the emergency setting should measure the effect of implementing broader use of a screening tool when evaluating trauma patients. With improved vigilance, we can improve our interventions, and we can begin to remedy the disgraceful problem of elder abuse.

## Compliance with Ethical Standards

**Conflict of Interest** The authors declare that they have no conflict of interest.

**Human and Animal Rights and Informed Consent** This article does not contain any studies with human or animal subjects performed by any of the authors.

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