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Elder abuse and neglect: What physicians can and should do

ABSTRACT

Although reports of elder abuse to official agencies have been steadily increasing, physicians report only 2% of reported cases. Multiple barriers to reporting exist. This article reviews the terminology, epidemiology, and clinical signs associated with elder abuse in the community and offers practical strategies for intervention.

KEY POINTS

Elder abuse encompasses physical, emotional, financial, and sexual abuse, as well as neglect.

Neglect can be passive or active, depending on the intent of the caregiver.

Reporting of elder abuse is inadequate, owing largely to lack of awareness in health care professionals and in society and lack of professional protocols.

A home visit by a home health agency worker is one way to gather information about a potentially abused patient's safety.

The son reports that his mother used to be highly functional and independent, but not for the past year. He appears very concerned about her health and functional status, and he answers all questions for her. When asked to leave the room so that the patient can be examined, he refuses, saying she would be afraid if left alone in a new place.

Ms. T's appearance is unkempt and her clothes dirty. In the course of discussing the management of Ms. T's clinical situation, the doctor offers help in the form of home health services, but the son refuses.

The doctor suspects that an abusive situation exists, but is unsure how to proceed.

■ ELDER ABUSE IS COMMON, UNDERREPORTED

Elder abuse is common but little studied and underreported. According to the House Select Committee on Aging,¹ each year between 1 and 2 million older Americans experience mistreatment. Yet, while 75% of hospital emergency departments have protocols for dealing with child abuse, only 27% have elder abuse protocols,² reflecting the lack of attention this problem receives from the community in general.

The purpose of this article is to familiarize physicians with the definitions, epidemiology, and clinical findings associated with elder abuse and to suggest practical strategies for intervening.

EVENTY-NINE-YEAR-OLD Ms. T is brought to the doctor's office by her son, with whom she lives. She has a history of severe osteoporosis with several compression fractures of the spine. This requires long-term pain control; otherwise she is reported as healthy.

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TABLE 1

Elder mistreatment: Categories and definitions

Willful act carried out with the intent of causing pain or injury

Examples: slapping, hitting, kicking, force-feeding, restraint, striking with objects

Willful act executed to cause emotional pain, injury, or mental anguish

Examples: verbal aggression or threat, threats of institutionalization, social isolation, humiliating statements

Financial

Misappropriation of an elderly person's assets for personal or monetary gains

Examples: theft of checks or money, or coercion to deprive the elderly person of his or her assets, such as forcible transfer of property

Nonconsensual sexual activity with an elderly person

Examples: suggestive talk, forced sexual activity, touching, fondling with a nonconsenting competent or incompetent person

Caregiver neglect

Intentional or unintentional failure of designated caregiver to meet needs necessary for elderly person's physical and mental well-being

Examples: failure to provide adequate food, clothing, shelter, medical care, hygiene, or social stimulation

Miscellaneous

Violation of rights

Examples: abandonment, denial of privacy or participation in decision-making

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Reports to agencies most certainly underestimate the prevalence of elder abuse

DEFINITIONS AND EPIDEMIOLOGY

Elder abuse

Controversy surrounds the term "elder abuse." Other terms often used include "inadequate care of the elderly" and "elder mistreatment."

In 1987, the American Medical Association (AMA)³ proposed this definition: " 'Abuse' shall mean an act or omission which results in harm or threatened harm to the health or welfare of an elderly person. Abuse includes the intentional infliction of physical or mental injury; sexual abuse; or withholding of necessary food, clothing, and medical care to meet the physical and mental needs of an elderly person by one having the care, custody, or responsibility of an elderly person."

The definition of abuse varies by state, since state agencies are charged with the identification and management of these cases.

Most experts believe the definition of abuse should include physical, emotional, financial, and sexual abuse, as well as neglect (TABLE 1). Abuse is also categorized as occurring

in the community or an institution. The primary focus of this article is elder abuse in the community (see sidebar on page 804 for an overview of institutional abuse).

Passive and active neglect

Neglect is the intentional or unintentional failure of a caregiver to meet the physical and emotional needs of an elderly person.4 Caregiver neglect is either passive or active.⁵

Active neglect is the willful failure to provide care.

Passive neglect is the nonwillful failure to provide care, owing to caregiver ignorance, lack of skills, or the caregiver's own failing health. For example, a visually impaired caregiver might not be able to give insulin properly to a diabetic patient.

Self-neglect, another important syndrome that is investigated by state agencies, is conduct by a patient that threatens his or her own health or safety.6 Advanced cognitive impairment and an inadequate support system can lead to self-neglect when a patient becomes



unable to care for himself or herself and ends up in a state of complete physical and social breakdown. This may result in impairment of physical health, eg, anemia and malnutrition.

An extreme form of self-neglect is the Diogenes syndrome, named for the ancient Greek philosopher who rejected material comforts, went about dirty and dishevelled, and lived in a barrel. Characteristics include domestic squalor, social withdrawal, tendency to hoard garbage, lack of shame, and refusal to accept help. Patients with this syndrome usually live alone. The underlying pathogenesis is postulated to be a lifelong subclinical personality disorder that gradually turns into gross self-neglect and social retreat.

Although self-neglect is fundamentally distinct from elder abuse, clinicians should be aware of the syndrome.

INCIDENCE AND PREVALENCE

The National Center on Elder Abuse^{7,8} noted a steady increase in the number of cases of domestic elder abuse reported between 1986 (117,000 cases) and 1996 (293,000 cases). However, reports to official agencies most certainly underestimate the prevalence, owing to various barriers described later in this article.

A widely cited community-based Boston survey⁹ revealed a prevalence of 32 cases of elder abuse per 1,000 older adults, with most of those cases involving physical abuse, and with others involving verbal abuse or neglect.

Who are the abusers?

In the Boston survey,⁹ the abusers were the victims' spouses in up to 58% of cases, children in 16%, and other relatives in 18%. Male caregivers were more likely to be abusive than female caregivers, but the gender disparities are not large: in some studies women were slightly more frequent perpetrators of elder abuse than men.^{10,11} And contrary to popular belief, caregiver stress does not necessarily lead to elder abuse, nor is elder abuse correlated with religion or marital status.⁹

Studies of culture and ethnicity in elder abuse have yielded interesting results. Different ethnic and cultural groups have their own definitions of elder abuse. For example, elderly Asian Americans were much

TABLE 2

Risk factors for elder abuse

Elder-specific

Cognitive impairment
Poor health and functional impairment
Social isolation
Shared living arrangement
Dependence on caregiver

Caregiver-specific

Substance abuse
Mental or physical illness
Financial dependence on the victim
Stress (divorce, bankruptcy, caregiver burden—in some studies, but not all)
History of violence

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MISTREATMENT? POSTGRAD MED 1999: 106:169–183.

more tolerant of abusive relationships and less likely to seek help. ¹² This probably stems from cultural values that emphasize hiding family shame, avoiding conflicts in the family, and promoting tolerance.

The victim's gender is not a factor in elder abuse, although women were previously believed to be victims of abuse more commonly than men. 10,11,13 TABLE 2 summarizes risk factors for abuse.

BARRIERS TO REPORTING ABUSE

Sadly, physicians report only 2% of all reported cases of elder abuse, despite mandatory reporting laws in most states. ¹⁴ One study found that family members report 20% of all cases, hospitals 17.3%, and home health aides 9.6%—all higher than the rate for physicians. ¹⁵

Many barriers to reporting of elder abuse have been identified. Some are results of an incomplete and flawed medical education system. Examples^{5,16}:

- Uncertainty about the validity of the diagnosis
- Lack of training in recognizing abuse
- Discomfort in confronting the alleged perpetrator
- Fear that the abuser will retaliate against the victim
- Unawareness of procedures for reporting
- Disinclination to be involved in the legal system

Ask about abuse as part of the health screening

Institutional elder abuse

nstitutional elder abuse and neglect are mistreatment that occurs in nursing homes and other congregate living environments for older people. The perpetrators may include staff members, other residents, or visitors.

The forms of mistreatment are similar to those in the community. The difference is the availability of health care providers in the environment to detect mistreatment.

Every state has a means for reporting and investigating alleged mistreatment in nursing homes.

Abusive staff members tend to be younger, less educated, less experienced in working in a nursing

home environment, and dissatisfied with their jobs.²¹ Nursing aides are more likely to be abusers than are nurses. Institutional characteristics that are risk factors for abusive behavior towards residents include a stressful working situation, staff "burnout," low wages, and lack of training in conflict resolution.

Steps to remedy institutional abuse may include increasing the funding, hiring well-qualified workers, and training in conflict management and stress reduction.²¹ Nursing home administrators should report abuse promptly and not wait until internal investigations are completed.⁵

- Hesitancy to "label" the victim or the abuser
- Perception that the proof of abuse is inadequate
- Lack of professional protocols for elder abuse
- Societal perceptions such as ageism
- Lack of public and professional awareness.

Often, caregivers or the victims themselves deny abuse, and family members may attempt to isolate victims from the medical system.^{5,16} Detecting elder abuse is challenging because an abusive situation may present itself in a nonsuspicious way, such as a diagnosis of dehydration or failure to thrive.

PHYSICIANS SHOULD REPORT ABUSE

When abuse occurs or is suspected, physicians—indeed, all health care providers—should step up to the task of notifying the proper authorities, even though this may be intimidating to some. In some states, they may be legally required to do so. (Laws vary from state to state, and physicians should clarify the existing law in their own state.¹⁷) Moreover, although physicians are rarely penalized for not reporting alleged cases of abuse, it should be part of one's moral and professional responsibility.

The primary care physician should also participate in the ongoing management once the case is reported.

Generally, physicians and other reporters

are granted immunity when it is believed that the reporting was done in good faith. In some states, mere suspicion of abuse is enough grounds for reporting.¹⁷

Reports should be made to the local adult protective service agency. In an emergency one may contact the police. Once a report has been filed, a social worker is assigned to the case and makes a home visit. After screening the case and conducting an interview, the social worker suggests solutions and gives information about available resources.

An abused adult with decisional capacity can decline the proposed solution or may request that the physician not disclose information. In the latter situation, a home visit may be offered as an attempt to provide additional helpful services and to gather more information about abuse.

ROUTINELY ASK ABOUT POSSIBLE MISTREATMENT

The AMA recommends that physicians routinely inquire about possible mistreatment of elderly patients, ¹⁸ much as they screen for other conditions such as colorectal or breast cancer. Precisely how to ask has not been determined; however, if the questions raise suspicion of an abusive situation, specific steps need to be taken, as outlined below.

Patients may not volunteer information, owing to cognitive impairment or fear of retaliation by the abuser (which includes fear of

Interview the caregiver and patient separately, starting with the patient



being placed in a nursing home, physical violence, or other retribution). Diminished cognitive capacity does not necessarily mean the patient cannot describe abuse, however.

Generally, the patient and the caregiver should be interviewed separately, and the patient should be interviewed first. This often brings factual discrepancies to light, such as, if the patient has been injured, how he or she got hurt.

Repeat the patient's responses, both to clarify your understanding and to allow the patient to reflect. "You didn't tell anyone because you were afraid that your son would get upset with you. Is that correct?"

General questions such as "Who cooks for you?" or "Do you get help with shopping when you need it?" may pave the path for more targeted queries: "Does your daughter ever hit you when you two have a disagreement?" "Do you have to wait a long time for your food or medicine?" Most physicians are uncomfortable with these specific questions, but they must be asked.

Inquire about abuse in a nonjudgmental way so the person suspected of abuse does not feel threatened. A statement like "You've been carrying a heavy responsibility for some time now and it's all right to feel burdened at times" expresses empathy toward the caregiver and may help establish rapport.

Consider unintentional neglect resulting from the failing health of the caregiver.

Common red flags for abuse include:

- Reluctance of the caregiver to leave the patient alone with the health care provider
- Poor knowledge of the patient's medical conditions
- Missed appointments
- Discrepancy between objective data and what the caregiver says (eg, subtherapeutic levels of medications in the blood when the caregiver says he or she gives the medication as directed)
- Frequent visits to the emergency department, physician's office, or hospital
- "Doctor shopping"
- Delay in seeking medical care
- Different histories given by the patient and the caregiver
- Unexplained injuries.^{4,5,18}

CLINICAL PRESENTATION

Physical examination

Physicians should be mindful of findings, presentations, and circumstances that could raise the question of abuse; **TABLE 3** summarizes some common but often missed presentations.

On the other hand, we also need to consider the possibility of making a mistake—either missing a case of abuse or incorrectly diagnosing abuse where none exists. For example, swelling of the hand due to rheumatoid arthritis may resemble trauma, digital ischemia due to Raynaud phenomenon may be confused with burns, a fracture may be the result of osteoporosis and not physical manhandling, and cigarette burns on the mouth may be due to poor functional status and not abuse.¹⁷

Pressure ulcers merit special mention. They are more common in the frail elderly, owing to limitation of mobility from cerebrovascular accidents, dementia, peripheral neuropathy, and musculoskeletal conditions. The problem is compounded when the caregiver is physically unable to turn the patient every 2 hours to prevent ulcers from developing.

Moreover, caregivers often inappropriately restrain severely demented patients to protect them from wandering into unsafe areas or from falling. Patients may also be restrained to control assaultive behavior, which often accompanies advanced dementia. Pressure ulcers can develop from being tied down for prolonged periods.

Laboratory and radiographic studies should be obtained on the basis of the findings of the history and physical examination. Radiographs can rule out fractures, and blood tests can exclude medical conditions that suggest abuse. For example, a complete blood count and a coagulation study can help when the cause of bruising is in question.

Documentation should be clear and legible because it could become crucial evidence in a court of law. Drawings and color photographs are very helpful in capturing telltale physical findings for this purpose.¹⁹

MANAGEMENT

A multidisciplinary team, including a nurse, psychiatrist, social worker, legal representa-

The goal is not to punish the abuser but to stop the abuse

TABLE 3

Physical findings that suggest elder abuse or neglect

General appearance

Poor hygiene, dirty clothing

Vital signs

Low blood pressure, rapid pulse (may indicate dehydration, blood loss, risk of falls)

Oral cavity

Ecchymosis (may indicate forced oral sex), cigarette burns on the lips and fingertips, tooth fractures, ill-fitting dentures, oral venereal lesions

Ear, nose, and throat

Deviated nasal septum (from repeated trauma), finger imprints or rope marks around the throat

Eye

Subconjunctival or vitreous hemorrhage (may indicate new trauma), retinal detachment, orbital fractures, and traumatic cataracts (may indicate old trauma)

Skin

Burns, lacerations, ecchymosis, pressure ulcers, bruises in various stages of healing, lesions suggestive of use of restraints on the extremities, immersion burns (glove-stocking distribution)

Chest and abdomen

Rib fractures, pneumothorax, splenic rupture, and intra-abdominal hemorrhages (may be manifested as Cullen or Turner signs)

Nervous system

Focal findings on examination, impaired mental status, impaired function, depression, anxiety

Orthopedic

Impaired gait, leg length discrepancies due to fracture

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Drawings and color photos are helpful in capturing legal evidence

tive, and administrative personnel, is helpful for eliciting information and devising a holistic intervention plan.^{20,21}

Ensure safety, respect autonomy

After establishing the diagnosis of elder abuse, it is crucial for the physician to ensure the patient's safety while respecting his or her autonomy. Discuss the situation with the patient as soon as feasible and try to create a safety plan—specific actions to take if matters turn exceptionally violent and refuge is needed immediately.

On the other hand, paternalism and a tendency to "take over" can have dire consequences, including sequestration of the suspected victim by the abuser.

What if the patient refuses intervention?

One of the most difficult situations that can occur is when the diagnosis of elder abuse has been clearly established, but the victim refuses intervention.

In this situation, you should establish whether the patient is mentally capable of making this decision. Elders with decision-making capacity often refuse help because they are afraid of being institutionalized or mistreated further. If this is the case, the physician should tell the victim about the patterns, frequency, and recurrence of abuse and about resources and emergency shelters available, and develop and follow up on a feasible safety plan. 18

For those who lack decision-making capacity, guardianship may be the next option. Often, state adult protective service agencies participate in this process, since by this time they have usually been involved in such cases as a result of mandatory reporting laws (TABLE 4).

Speed of intervention

Urgent. If you suspect a patient is in immediate danger and if the patient has decision-making capacity, encourage the patient to put physical distance between himself or herself



TABLE 4

Tailored practical strategies for intervening in elder abuse

Alzheimer patient with dementia-related disruptive behavior

Exclude underlying medical problems that may contribute to the agitation, eg, fecal impaction and infection Refer for psychiatric evaluation, consider antipsychotic drugs

Use behavioral modification

Maintain continuity of care

Repeatedly reorient to place, person, time

Refer for home health services, respite care, possible nursing home placement

Caregiver to Alzheimer patient becoming physically assaultive during activities of daily living assistance

Arrange for respite services for the caregiver, contact support groups

Refer for counseling, home help services

Possible nursing home placement of the victim

Caregiving adult child with substance abuse problems using demented parent's money to feed own habits

Refer abuser to drug or alcohol rehabilitation and counseling

Guardianship to handle finances

Legal assistance

Decompensated schizophrenic adult child is assaultive to parents

Psychiatric referral for the abuser

Mental health counseling for the victim

Explore alternative living arrangements

Overt physical abuse by abusive child or spouse

Treat injuries

Refer to shelters

Give emergency contact phone numbers and addresses

Admit to the hospital to protect the victim

Contact adult protective services

Abused older adult without decisional capacity refuses intervention

Contact adult protective services

Arrange for guardianship, conservatorship

Provide assistance for financial management

Abused older adult with decisional capacity refuses intervention

Educate patient about incidence, risk factors, patterns, and consequences of abuse—abuse escalates with time Give emergency contact phone numbers and addresses, information about shelters Follow up

and the abuser. Options include hospitalization, transfer of care to a reliable friend or family member, or referral to an emergency shelter. If the home belongs to the victim, removing the abuser is of course the fairest strategy, although it may be difficult to implement.¹⁸

Less urgent. Tailor the intervention to the specific problem.¹⁷ For example, if the care of the patient is burdensome because of multiple comorbid conditions and functional impairments, the following may be helpful for the victim:

- Home health services
- Adult day care

- Church activities and pastoral visitations
- Social service resources.

Likewise, the following may be considered

for the caregiver:

- Periodic respite care
- Caregiver training
- Support groups
- Assistance from family or friends.

Also important to address are specific medical issues, such as pneumonia, congestive heart failure, incontinence, dementia, polypharmacy, psychiatric conditions such as anxiety and depression, and substance abuse by the caregiver.



If these exist, order a home safety evaluation to ensure that the appropriate equipment is in the home. Consider moving the patient to an assisted living facility or a skilled nursing facility. Offer treatment for caregivers with substance abuse problems.

AN ETHICAL DILEMMA

The physician walks a tightrope, balancing confidentiality and trust with the need for patient safety. Many argue that mandatory reporting laws for elder abuse reflect paternalism and ageism.¹⁸

When there is an established trusting relationship between the physician and the patient, the physician can explain to the patient that it is the physician's obligation to report even suspected cases of abuse.

The goal is not to punish the victim or the abuser but to stop further abuse. Building a therapeutic alliance with the family may help. By not confronting the perpetrator and not blaming the victim, the doctor can assure the patient that safety is the desired outcome. When mistreatment results from the caregiver being overburdened, physician intervention

may be welcome.

The intervening physician may use another physician or professional, friend, or family member whom the patient trusts to make recommendations. 18 Other sources of information about programs and services for the elderly are visiting nurses and personnel from adult protective services programs. A home visit to offer these services is also a way to gather information about the patient's safety.

CASE CONTINUED

Our patient Ms. T was assisted by collaborative efforts between the physician and the visiting nurse. The son agreed to let the visiting nurse service check up on his mother's health once a week. When the nurse warned him that she was obliged to report the probability of abuse in the home to the authorities, he consulted with the physician, and arrangements were made to include Ms. T in a house-call program. This case illustrates the importance of house calls in follow-up of cases of abuse. The visiting nurse service also remained involved in the case for some time.

REFERENCES

- U.S. Congress, House Select Committee on Aging. Elder abuse: what can be done? Washington, DC: Government Printing Office, 1991.
- McNamara RM, Rousseau E, Sanders AB. Geriatric emergency medicine: a survey of practicing emergency physicians. Ann Emerg Med 1992; 21:796–801.
- Council on Scientific Affairs. Elder abuse and neglect. JAMA 1987; 257:966–971.
- Kruger RM, Moon CH. Can you spot the signs of elder mistreatment? Postgrad Med 1999; 106:169–183.
- Kleinschmidt KC. Elder abuse: a review. Ann Emerg Med 1997; 309:463–472.
- Tatara T. Suggested state guidelines for gathering and reporting domestic elder abuse statistics for compiling national data. Washington, DC: National Aging Resource Center On Elder Abuse (NARCEA); 1990.
- Executive summary. In: Tatara T, Kuzmeskus LB. Summaries of the statistical data on elder abuse in domestic settings for FY 95 and FY 96. Washington, DC: National Center on Elder Abuse, 1997:vii–ix.
- Tartara T, Kuzmeskus LB. Elder abuse in domestic settings. Elder Abuse Information Series No.1. Washington, DC: National Center on Elder Abuse (NCEA), 1996–1997.
- Pillemer K, Finkelhor D. The prevalence of elder abuse: a random sample survey. Gerontologist 1988; 28:51–57.
- Paveza GJ, Cohen D, Eisdorfer C, et al. Severe family violence and Alzheimer's disease: prevalence and risk factors. Gerontologist 1992; 37:493–497
- Tatara T. Understanding the nature and scope of domestic elder abuse with the use of state aggregate data: summaries of the key findings of a national survey of state APS and aging agencies. J Elder Abuse Neglect 1993; 5:35–37.
- Moon A, Williams O. Perceptions of elder abuse and help-seeking patterns among African-American, Caucasian American, and Korean-American elderly women. Gerontologist 1993; 33:386–395.

- Tatara T. Summaries of national elder abuse data: an exploratory study of state statistics based on a survey of state adult protective service and aging agencies. Washington, DC: National Aging Resource Center on Elder Abuse (NARCEA).
- Rosenblatt DE, Cho K, Durance PW. Reporting mistreatment of older adults: the role of physicians. J Am Geriatr Soc 1996; 44:65–70.
- The Administration on Aging. The National Elder Abuse Incidence Study; final report September 1998. http://www.aoa.gov/abuse/report/default.htm. Accessed 6/14/02.
- Swagerty DL Jr., Takahashi PY, Evans JM. Elder mistreatment. Am Fam Physician 1999; 59:2804–2808.
- Marshall CE, Benton D, Brazier JM. Elder abuse: using clinical tools to identify clues of mistreatment. Geriatrics 2000; 55(2):42–53.
- American Medical Association Diagnostic and Treatment Guidelines on Elder Abuse and Neglect. Chicago, IL: American Medical Association, 1992.
- Lachs MS, Pillemer K. Abuse and neglect of elderly persons. N Engl J Med 1995: 332:437–442.
- Wolf RS, Li D. Factors affecting the rate of elder abuse reporting to a state protective services program. Gerontologist 1999; 39:222–228.
- Pillemer K, Moore DW. Abuse of patients in nursing homes: findings from a survey of staff. Gerontologist 1989; 29:314–320.

RESOURCES

State elder abuse hotlines. Toll-free, available 24 hours; consult local directory.

Adult Protective Services National Domestic Violence Hotline. 800-799-SAFE;

TTY 800-787-3224.

National Center on Elder Abuse: http://www.elderabusecenter.org. US Administration on Aging. http://www.aoa.gov.

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