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Elder Abuse Research: A Systematic Review

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The purpose of this research was to provide a systematic review of, and assign an evidence grade to, the research articles on elder abuse. Sixteen health care and criminal justice literature databases were searched. Publications were reviewed by at least two independent readers who graded each from A (evidence of well-designed meta-analysis) to D (evidence from expert opinion or multiple case reports) on the quality of the evidence gained from the research. Of 6,676 titles identified in the search, 1,700 publications met inclusion criteria; omitting duplicates, 590 publications were annotated and graded.

KEYWORDS *elder abuse, elder mistreatment, abuse, neglect, exploitation, research*

INTRODUCTION

Elder mistreatment:

refers to (a) intentional actions that cause harm or create a serious risk of harm (whether or not harm is intended) to a vulnerable elder by a caregiver or other person who stands in a trust relationship to the elder or (b) failure by a caregiver to satisfy the elder's basic needs or to protect the elder from harm. (National Research Council, 2003, p. 3)

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The World Health Organization defines abuse as “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” (2009, p. 6). Types of elder mistreatment include abandonment, emotional abuse, financial or material exploitation, neglect, physical abuse, and sexual abuse (Daly & Jogerst, 2001). For the purpose of this study, the term elder abuse will be used as the all-inclusive term, as it is the main term listed in all states’ and the District of Columbia’s adult protective services-related statutes. Elder abuse is also the term used as the medical subject heading for literature searches by the National Library of Medicine (NLM). The NLM defines elder abuse as emotional, nutritional, or physical maltreatment of the older person generally by family members or by institutional personnel.

The recent 2003 National Research Council’s report on elder abuse research stated, “no efforts have yet been made to develop, implement, and evaluate interventions based on scientifically grounded hypotheses about the causes of elder mistreatment, and no systematic research has been conducted to measure and evaluate the effects of existing interventions” (p. 121). The purpose of this study was to provide a systematic review of, and assign an evidence grade to, the research articles on elder abuse.

METHODS

To determine the current status and quality of elder abuse research, a comprehensive review of the health sciences literature was performed, and each publication was graded. All literature searches were conducted from inception of each index through December 31, 2008. Elder abuse research publication inclusion criteria were English-language articles reporting completed research on abuse of people aged 55 years and older from any country. An expert reference librarian conducted the electronic search with input from study investigators. Sixteen databases were searched: AgeLine Database; American Theological Library Association (ATLA) Religion Database with AtlaSerials; Cochrane Database of Systematic Reviews; Cumulative Index to Nursing and Allied Health Literature (CINAHL) Plus; Education Resources Information Center (ERIC); Index to Legal Periodicals; LegalTrac; LexisNexis Academic; LexisNexis Government Periodicals Index; National Criminal Justice Reference Service (NCJRS) Abstracts Database; PsycINFO; PubMed, which included MEDLINE; Social Work Abstracts; and the Web of Science three indexes: Social Sciences Citation Index (SSCI), Science Citation Index Expanded (SCI-EXPANDED), and the Arts & Humanities Citation Index (A & HCI). The databases were searched using combinations of the following keywords: abuse, aged, elder, elder abuse, neglect, and exploitation. In addition, two other mechanisms were used to retrieve the elder abuse research:

a manual search of the reference list of publications dated prior to 1990 and a reference search of elder abuse reviews or annotations.

From the 16 database searches, 6,676 citations and were retrieved (see Table 1). Each citation was reviewed by one of the investigators. If an abstract was not available and the title indicated it could be research, the publication was viewed online or retrieved from a library. From the 6,676 citations, 1,700 were deemed to be elder abuse research. All selected articles were published in peer-reviewed journals and contained original data on elder abuse. Many citations were overlapping, as manuscripts are indexed in duplicate databases. Single case reports were omitted from the review.

The search for elder abuse reviews or annotations resulted in seven publications in which the reference lists were reviewed (Cloke, 1983; Giordano & Giordano, 1984; Johnson, O'Brien, & Hudson, 1985; Moore & Thompson, 1987; National Clearinghouse on Family Violence, 1983; B. Schlesinger & R. Schlesinger, 1988; Spencer, Ashfield, Vanderbijl, & Bischof, 1996). The reference list of those citations was reviewed to determine if there were additional elder abuse research articles available not already found in the database citation review. Most of these reviews were of books, book chapters, conference proceedings, Internet sites, nonresearch articles, research articles, and reports. The reference lists showed no new research articles beyond those found in the indexes.

Each research study was critically reviewed, annotated, and assigned an evidence grade based upon the type and strength of evidence from the

TABLE 1 Literature Databases Searched, Number of Citations, and Research Publications Reviewed

Database	Number of citations	Number of research publications
AgeLine	713	409
ATLA Religion Database with AtlaSerials	66	3
CINAHL Plus	349	276
Cochrane Database of Systematic Reviews	5	0
ERIC	84	40
Index to Legal Periodicals	152	1
LegalTrac	153	1
LexisNexis Academic	498	0
LexisNexis Government Periodicals Index	15	1
NCJRS Abstracts Database	1009	166
PubMed with MEDLINE	1,705	236
PsycINFO	653	267
Social Work Abstracts	229	55
Web of Science:Social Sciences Citation Index	731	157
Web of Science: Science Citation Index Expanded	312	88
Web of Science: Arts & Humanities Citation Index	2	0

research. Different kinds of research vary in terms of methodological validity, how results are presented, and how they are understood by individuals. The grading schema used to make recommendations for the elder abuse research publications were based on the level of evidence and grade for recommendations by the Centre for Evidence Based Medicine at The University of Oxford and adapted for this project (Centre for Evidence Based Medicine, 2009). The following grading levels were used:

- A = evidence from well-designed meta-analysis
- B = evidence from well-designed controlled trials, both randomized and nonrandomized, with results that consistently support a specific action (e.g., assessment, intervention, or treatment)
- C = evidence from observational studies (e.g., correlational, descriptive studies) or controlled trials with inconsistent results
- D = evidence from expert opinion or multiple case reports

Nonrandomized controlled study designs can include nonrandomized controlled trial, controlled before-and-after study, and interrupted time series study. After each article was reviewed, annotated, and graded by an investigator, a second investigator reviewed the annotation and grade. Grades were identical for 539 (91%) of the studies. Consensus between the two reviewers was reached on the remaining 51 (9%) publications after re-review of the publications' methods in question. Kappa was 0.7466 (95% CI (0.6819, 0.8114)), indicating substantial inter-rater agreement.

RESULTS

Once duplicates were deleted from the 1,700 publications, 590 publications were annotated and graded. No elder abuse research publication was given an A grade. Fourteen publications were given a B grade, 483 were given a C grade, and 93 were given a D grade. Of the 590 publications, 492 were quantitative studies, 78 were qualitative studies, and 20 were case studies. Studies were conducted in 32 countries; 374 studies were conducted in the United States, 51 in Canada, and 20 studies in Australia. The 590 articles were published by 203 different journals with the following journals having the most publications: *Journal of Elder Abuse & Neglect*, 171 publications; *The Gerontologist*, 35 publications; the *Journal of Gerontological Social Work*, 21 publications; and the *Journal of the American Geriatrics Society*, 19 publications. Fifteen journals published 324 (55%) of the publications.

Fifty-five (9%) of the publications were published from 1975 through 1989, 203 (34%) were published in the 1990s, and the most, 332 (56%) publications, from 2000 to 2008 (see Figure 1). The earliest research publication

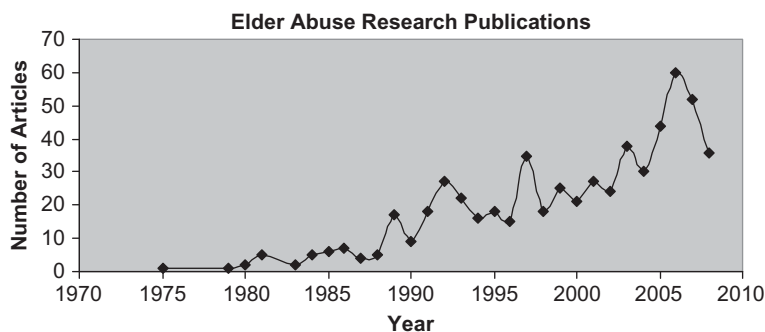


FIGURE 1 Elder abuse research articles published by year.

found was a case study of 30 patients living in squalor referred to a geriatric in-patient unit. A battery of tests were conducted including descriptions of the living environment, family, nutrition, and finances with a resulting conclusion that severe neglect in old age is a syndrome and that care can only be provided with the patient's permission (Clark, Mankikar, & Gray, 1975). The next earliest, an exploratory study, was conducted to determine the incidence and nature of abuse in cases accepted at a chronic illness center. In a 12-month period, 39 cases of abuse were identified from 404 cases. From those 39 cases, 51% were physically disabled, 10% had hearing or visual impairment, 18% were incontinent, and 41% were cognitively impaired. Those most common type of abuse was physical (7%), psychological and material (5%), and violation of rights (2%) and in 90% of the cases the perpetrator was a relative. Unfortunately, 26% of the victims were resigned to the situation, 33% denied the abuse, and 21% were withdrawn (Lau & Kosberg, 1979).

Fourteen publications were grade B, experimental with pretest-posttest and factorial designs, mainly published in education journals (Brownell & Heiser, 2006; Desy & Prohaska, 2008; Golding, Yozwiak, Kinstle, & Marsil, 2005; Goodridge, Johnston, & Thomson, 1997; Hsieh, Wang, Yen, & Liu, 2008; Leedahl & Ferraro, 2007; Pillemer & Hudson, 1993; Nusbaum, Mistretta, & Wegner, 2007; Reay & Browne, 2002; Richardson, Kitchen, & Living, 2002, 2004; Uva & Guttman, 1996; Vinton, 1993; Wilber, 1991). In these studies, subjects were both randomized and nonrandomized. Study objectives varied from examining the effectiveness of abuse prevention training programs, psycho-social support groups, a daily money management program, and an anger management program with education (see Table 2). Two of the studies implemented interventions for victims of abuse (Brownell & Heiser, 2006; Wilber, 1991), and one implemented interventions for perpetrators of abuse (Reay & Browne, 2002). Most of the studies were targeted to health care professionals (Desy & Prohaska, 2008; Goodridge et al., 1997; Hsieh et al., 2008; Pillemer & Hudson, 1993;

Richardson et al., 2002, 2004; Uva & Guttman, 1996; Vinton, 1993). Two of the publications were for the same study and intervention, but had different outcomes (Richardson et al., 2002, 2004). Nine of the studies were conducted in the U.S. (Brownell & Heiser, 2006; Desy & Prohaska, 2008; Golding et al., 2005; Leedahl & Ferraro, 2007; Pillemer & Hudson, 1993; Nusbaum et al., 2007; Uva & Guttman, 1996; Vinton, 1993; Wilbur, 1991), three in England (Reay & Browne, 2002; Richardson et al., 2002, 2004), one in Canada (Goodridge et al., 1997), and one in Taiwan (Hsieh et al., 2008).

Forty-three first authors have published more than three publications, for a total of 233 (39%) publications. Twenty-two first authors have published five or more publications, with a total of 161 publications. The more highly published researchers are from the disciplines of criminology, medicine, nursing, political science, psychology, public administration and public affairs, public health, social welfare policy, sociology, and social work.

During the grading process, studies were categorized by the following concepts: adult protective services/area agency on aging, caregiver, case study, definitions, education, instruments, interventions, legislation, nursing home, prevalence, qualitative, research review, theory, and emergency department. A summary of the prevalence research indicates that over time similar methodological issues remain the same.

Elder Abuse Prevalence

Elder abuse prevalence has been estimated in different settings, and in these studies various methods for data collection were used. A sample of various studies that depict elder abuse prevalence is presented from major epidemiological studies, agency reports, health care professionals, caregivers and family, and medical record review. These studies range from the earliest prevalence study in 1979 (Lau & Kosberg, 1979) to some of the latest studies in 2008 (Laumann, Leitsch, & Waite, 2008; Phua, Ng, & Seow, 2008). Eight major epidemiological studies estimated the prevalence of elder abuse in different countries. Overall prevalence rates of elder abuse have varied considerably across studies, from 2.6% in United Kingdom (Manthorpe et al., 2007), 3.2% in Boston (Pillemer & Finkelhor, 1988), 4% in Canada (Podnieks, 1992), 5.4% in Ahtari, Finland (Kivela, Kongas-Saviaro, Kesti, Pahkala, & Ijas, 1992), 5.6% in Amsterdam (Comijs, Post, Smit, Bouter, & Jonker, 1998), 6.3% in a district of Seoul (Oh, H. S. Kim, Martin, & H. Kim, 2006), 8.8% in Britain (Ogg & Bennett, 1992), to 14% in Chennai, India (Chokkanathan & Lee, 2005). Rates were calculated for persons 65 years and older in all the studies except for Britain, where the age was 60 years, and the United Kingdom, where the age was 66 years.

TABLE 2 Elder Abuse Research Intervention Studies

Publication	Study objective	Subjects	Design and randomization	Intervention	Outcomes	Results
Brownell & Heiser, 2006	To evaluate outcomes of an elder mistreatment psycho-social support group	16 women, ages 69–83	Pretest/posttest design, nine randomized to intervention and six to control	Support group meeting weekly, 2 hours for 8 weeks	Depression, guilt, self-esteem	There was no significant difference by group
Desy & Prohaska, 2008	To evaluate the impact of the GENE course on emergency nurses' geriatric best practices in the emergency department	Convenience sample of 102 emergency nurses	Repeated measures design, preintervention/postintervention design, no randomization	1-day course with 10 modules of which one was elder abuse and neglect	Knowledge gained, self-rated ability to provide care, incorporation of knowledge gained into practice, use of geriatric assessment tools and geriatric protocols	Knowledge increased significantly Had incorporated knowledge in assessing for elder abuse and neglect Had increased use of assessment tools and geriatric protocols
Golding, Yozwiak, Kinzle, & Marsil, 2005	To investigate mock jurors' perceptions of elder abuse	Experiment 1: 116 Experiment 2: 132 college students	Exp. 1: 3 × 2 between participants factorial design Exp. 2: 2 × 2 × 2 between participants factorial design No random assignment	Change of age and gender of victim and perpetrator	Guilt verdict, witness veracity, and influence, and the victim's accuracy of recall	Women were more likely than men to believe the testimony of the elderly alleged victim and less likely to believe the defendant's testimony regardless of age

Goodridge, Johnston, & Thomson, 1997	To examine the impact of a nursing assistant abuse prevention training program in a long-term care facility	126 nursing assistants	Pretest/posttest design, not randomized	1-day training workshop on abuse prevention	General perceptions of and attitudes toward residents, job performance and care quality, burnout, staff-resident conflict, and aggression by residents toward nursing assistants	Posttest nursing assistants were less likely to agree that the elderly were like children, there was significant decline in self-reported nursing assistant-resident conflict, and supervisors reported significant improvements in job performance
Hsieh, Wang, Yen, & Liu, 2008	To examine the effectiveness of an educational support group in alleviating caregiver's psychological abusive behavior, reducing work stress, and promoting knowledge	100 nursing home caregivers (50 in each group)	Pretest/posttest design, quasi-experimental design with control: two experimental and two control nursing homes, no random assignment	Eight 90-minute sessions of education and mutual support	Psychological elder abuse behaviors, work-level stress, and knowledge of gerontology nursing	Significantly psychological elder abuse behaviors decreased and knowledge increased in experimental group. There was no effect on work stress

(Continued)

TABLE 2 (Continued)

Publication	Study objective	Subjects	Design and randomization	Intervention	Outcomes	Results
Leedahl & Ferraro, 2007	To understand if society does truly deem elder crimes less important than other crimes or news stories	60 volunteers	3 × 2 × 2 mixed design, random assignment	Presented information on elder abuse and a case story, 5 minutes	Differences in age, condition, or time	There were no differences by group
Nusbaum, Mistretta, Wégner, 2007	To determine any change in attitude and behavior over time for police and firefighters in detecting elders at risk for abuse	44 police and firefighters at baseline, 3 and 6 months	Preintervention/postintervention design, no random assignment	1-hour education session	Changes in attitudes and/or behavior that would increase interest in using screening techniques to detect elders at risk	The education intervention did not produce any lasting change in attitudes and behavior in the desired direction
Pillemer & Hudson, 1993	To evaluate the abuse prevention curriculum for nursing assistants in long-term care facilities	114 nursing assistants in 10 nursing homes	Pretest/posttest design, randomly selected from all three shifts	Eight training modules, 6 to 8 hours	Frequency of abusive behaviors by staff, conflicts with residents, and attitude change	Self-reported abusive actions by staff declined after the training. Conflict items were significantly lower at posttest. The attitude that residents are like children decreased significantly

Reay & Browne, 2002	To evaluate the effectiveness of an anger management intervention program for individuals who physically abuse or neglect their elderly dependents	19 family members who had physically abused or neglected their elderly dependents	Preintervention/postintervention design, nine perpetrators assigned to group, one who had committed physical abuse and 10 assigned to group 2 who had committed neglect, no random assignment	Educational program was one-to-one 90-minute meeting with psychologist; 4 weeks later the same for anger management	Conflict, strain, depression, anxiety, and cost of care	There was significant reduction in level of strain, depression, anxiety and cost of care after the education intervention and then after the anger manager intervention
Richardson, Kitchen, Livingston, 2004	To evaluate the effect of educating staff to increase their skills to deal with abuse	64 employees of community health trust or social services	Pretest/posttest design, randomized either two groups: education course or reading material same content	Educational course on identification and management of all types of abuse	Knowledge and management of abuse	The education group improved significantly on scores after the course. The reading material scores declined

(Continued)

TABLE 2 (Continued)

Publication	Study objective	Subjects	Design and randomization	Intervention	Outcomes	Results
Richardson, Kitchen, Livingston, 2002	To compare the effectiveness of attending an education course to printed educational material in improving management of abuse of older people. To determine if positive attitude and low burnout scores are related to improvement	64 employees of community health trust or social services	Pretest/posttest design, randomized either two groups: education course or reading material same content	Educational course on identification and management of all types of abuse	Attitude of health care personnel toward demented patients and burnout	No significant different in attitude or burnout
Uva & Guttman, 1996	To evaluate the knowledge of and education in elder abuse by emergency medicine residents	31 emergency medicine residents	Survey before or after intervention, subjects randomized to one of two groups	50-minute educational session on elder abuse	Knowledge, education, and reporting of abuse	Those in the education course and post survey remembered the previous course in elder abuse compared to the other group. There was significantly more residents in the education course post survey who know how to report abuse. There were no differences in the group one year later

Vinton, 1993	To evaluate the effectiveness of an elder abuse and neglect prevention program	107 participants, homemakers, law enforcement, personal care aides, respite workers	Pretest/posttest design, no random assignment	Seven identical training sessions of 4 hours held during the summer	Knowledge of law, prevalence of elder abuse, nature of elder abuse, principles that guide adult protective services	Knowledge about elder abuse and the law significantly increased
Wilber, 1991	To determine if persons referred to protective services and offered Daily Money Management (DMM) would have significantly lower levels of appointment to conservatorship	63 persons aged 60 years and older	Pretest/posttest design, randomized either two groups: DMM or control group	DMM	Appointment of conservatorship	There was no significant difference between groups

Other prevalence estimates have been generated from the annual state reports from protective services agencies, providing actual cases of elder abuse based on those reported. From 1999 APS annual reports, 242,430 recorded investigations of domestic elder abuse in 47 states were found; that is, 5.5 investigations per 1,000 elders. Also reported were 102,879 substantiations, or 2.7 substantiations per 1,000 elders (Jogerst et al., 2003). State APS administrators find it difficult to answer surveys about elder mistreatment aggregated at the state level, as evidenced by the fact that not all states are reporting (Daly & Jogerst, 2005; Jogerst et al., 2003).

In a convenience sample where 228 professionals were interviewed, 60% reported dealing with passive abuse, and 8% dealt with abuse leading to serious injury (Hickey & Douglass, 1981). In a survey mailed to more than 1,000 health care organizations in Western Australia, the 340 respondents reported 253 suspected cases of abuse, suggesting an estimated prevalence rate of 0.58 percent (Boldy, Horner, Crouchley, & Davey, 2005). In Sweden, district nurses described the patterns of abuse of elderly persons living independently in their homes. Eighteen of the 153 nurses reported 30 cases of elder abuse as defined by the elderly persons over a 6-month time period. The most commonly reported type of abuse was psychological abuse, followed by isolation, physical abuse, neglect, and material abuse (Saveman, Hallberg, Norberg, & Eriksson, 1993).

When caregivers of elder patients in respite care were interviewed about physical and verbal abuse and neglect, 23 (45%) of 51 carers confessed to some type of abuse, with verbal abuse the most frequent type (Homer & Gilleard, 1990). Australian home health caseworkers were surveyed to determine 1-month prevalence from their respective caseloads. Of 598 clients, 33 (5.5%) had experienced some form of abuse (Cupitt, 1997).

Elder abuse prevalence in nursing homes is difficult to estimate. Through a random sample survey of 577 nursing home nurses and nursing assistants, 36% had witnessed an incident of physical abuse in the preceding year, and 81% had observed an incident of psychological abuse. Ten percent of the respondents admitted to committing one or more abusive acts themselves (Pillemer & Moore, 1989). Of 27 randomly selected nursing assistants from three nursing homes, 93% reported they had seen or heard of residents being mistreated, abused, and neglected (Mercer, Heacock, & Beck, 1993). With 90% of the administrators and directors of nursing reporting from Iowa's 409 stand-alone nursing homes, 18.4 abuse events per 1,000 nursing home residents were reported to state authorities in a year, with 5.2 of those reports substantiated (Jogerst, Daly, Dawson, Peek-Asa, & Schmuck et al., 2006).

DISCUSSION

To understand the current state of elder abuse research, a rigorous systematic review of the literature was conducted. Until now, the actual state of

elder abuse research was unknown. In an attempt to find all elder abuse research, 16 databases were searched, and 590 research publications were found. Contradicting the National Research Councils conclusion of no intervention studies being conducted, this study found 14 efforts to develop, implement, and evaluate interventions based on scientifically grounded hypotheses to measure and evaluate the effects of existing interventions on the prevention of elder abuse. The first of the intervention studies was conducted in 1991 (Wilbur, 1991) and the latest in 2008 (Desy & Prohaska, 2008; Hsieh et al., 2008).

The education interventions focused on caregivers of elders and ranged from one hour to eight hours taught by different methods, such as one-to-one instruction, education in a classroom, or education with group support. Outcomes were different by study and had some significant improvements regardless of the length of the education session. The outcome measures were different across studies and cannot be compared. Iowa is the only state that requires all mandatory reporters to be trained on dependent adult abuse within six months of employment and every five years thereafter. Unfortunately, the required education did not change the investigation of findings of abuse in Iowa. Required dependent adult abuse education for mandatory reporters has not increased the domestic investigation or substantiation rates for elder abuse (Jogerst et al., 2003).

The breadth of journals and indexes housing elder abuse research demonstrates the magnitude of this social and criminal problem as well as the interdisciplinary efforts to identify the victims, causes of abuse, and interventions to prevent it. A small portion of this research has focused on finding interventions to facilitate the prevention of abuse. The 14 intervention studies generated three types of solutions; education of caregivers, adult protective service workers, and health care personnel; support group meetings; and a daily money management program. Prevention of elder abuse will require a comprehensive approach involving a multifaceted intervention including multiple sectors of society. Other appropriate and potential interventions for preventing elder abuse that have not been tested in a rigorous trial include legislation, respite programs, social support, batterer interventions such as anger management, cognitive therapy, and couples therapy.

Prevalence studies are conducted in different settings, with different types and definitions of elder abuse and various instruments to measure the abuse. With such a variation, it is difficult to compare results, and comparisons should only be made across the same type of study. For example, if the prevalence of elder abuse is determined in the emergency room, that is very different from an epidemiological study conducted in the Boston area.

From this review, it is evident that a national system of standardized elder abuse data collection is paramount. A standardized elder abuse system would define essential data elements that at a minimum includes victim and perpetrator name, address, age, gender, race, type of abuse, and time,

date, and location of the alleged incident, and at a maximum would link the social and criminal system's databases. The extent of overlap from the Medicaid Fraud Reports, the National Ombudsman Reporting System, the adult protective services/elder services annual reports, and the federal nursing facility Automated Survey Processing Environment Complaints/Incidents Tracking System is unknown.

This review has several limitations. Though the publications were graded, that is the only criteria used to assess the quality of the studies. Other criteria, such as sufficient description of study objective, appropriate study design, satisfactory response rate, or adequacy of sample size were not evaluated. Although we conducted a comprehensive search, it is possible we missed a relevant study. This was a comprehensive review of elder abuse research printed in journals, not a meta-analysis.

This review describes the state of current elder abuse research, which is comprised primarily of descriptive, observational, case studies, no meta-analyses, and a few intervention trials. In a field that is young in research publications—family medicine—researchers in that field published 790 articles in 2003, compared to 38 elder abuse research articles in the same year (Pathman, Viera, & Newton, 2008). The evidence is clear; elder abuse research is minimal and difficult to discern across disciplines. The U.S. population depends on federal agencies to promote scientific research and to facilitate the development of science-based policies. Lack of funding efforts directed toward elder abuse has weakened the support for these studies. Few National Institutes of Health program announcements or requests for applications have been released with a focus on elder abuse.

The 590 annotated publications can be found on the Department of Family Medicine, Carver College of Medicine website at <http://www.uihealthcare.com/depts/med/familymedicine/index.html>. This site is searchable by publication grade, country, or any search term.

CONCLUSION

This research presents key findings, scope, and limitations of elder abuse research to date. It is a valuable source of information for both active and developing scholars in the field, both as a review of the literature and as a gap analysis with implications for further study. The findings are also significant as a guide for research agenda building for government and foundation funding sources. Little evidence is available that supports any intervention to prevent elder abuse. A few intervention trials have been conducted to facilitate the performance of health care professionals and reduce their abuse while at work, with success demonstrated in most studies. Funding for elder abuse research is warranted, and more rigorous elder abuse research and more investigators are needed.

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