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The effectiveness of educational programs to improve recognition and reporting of elder abuse and neglect: A systematic review of the literature

Kim L. Alt, BS [Medical Student], Annie L. Nguyen, MPH [Graduate Student], and Linda N. Meurer, MD, MPH* [Associate Professor]

Department of Family and Community Medicine Medical College of Wisconsin 8701 Watertown Plank Road Milwaukee, WI 53122

Abstract

Health professionals often lack adequate protocols or knowledge to detect, manage and prevent elder maltreatment. This systematic review describes and evaluates existing literature on the effectiveness of educational interventions to improve health professionals' recognition and reporting of elder abuse and neglect. Fourteen articles described 22 programs ranging from brief didactics to experiential learning and targeting a variety of health and social service audiences. Most evaluations were limited to satisfaction measures. These programs may result in increased awareness, collaboration, and improved case-finding. However, using the published literature to guide new program planning is constrained by lack of details and limited evaluations.

Keywords

“elder abuse”; “maltreatment”; “neglect”; “systematic review”; “education”

Introduction

Elder maltreatment is associated with adverse outcomes, including mortality, yet it is widely under-recognized and underreported in the United States. In 1996, a Senate Special Committee on Aging conducted the nation's first methodological estimate of elder abuse incidence. This National Elder Abuse Incidence Study found that nearly 550,000 adults over the age of sixty experienced some form of abuse, including physical, emotional, sexual or financial abuse, and neglect by others or self-neglect. Of that total, only 21 percent of abusive situations were reported to Adult Protective Services (APS) indicating a significant number of hidden situations (NCEA, 1998). Recent data indicate an increase in reports to APS with over 565,000 reports made in 2003, up by 20 percent from 2000 (Summers, 2006). This trend may represent a modest improvement in elder abuse awareness and reporting or simply an increase in the burden of the problem. The potential for elder maltreatment will

*(corresponding author), lmeurer@mcw.edu.
kle@mcw.edu
alnguyen@mcw.edu

increase as the aging population steadily grows in size, and unless recognition and reporting practices are improved, many more cases will remain unreported and unnoticed.

Because the issue of elder abuse transcends public health and medical boundaries, as it also falls within the social work and criminal justice realms, it is one in which prevention and intervention can potentially originate from a variety of professional sources. The professionals and institutions that provide medical care, community-based aging services, and emergency response services (first responders) to elders are ideally situated to detect, manage and report elder abuse. They include physicians, nurses, hospital staff, law enforcement officers, home-health workers, aging networks and local senior organization staff and volunteers. However, many barriers exist including varied definitions of elder abuse and lack of reliable data on frequency, causes and effective prevention (Summers, 2006). There is often inadequate knowledge among personnel and a lack of institutional protocols in place to facilitate appropriate responses to instances of abuse or suspected abuse. It is imperative that reliable information and protocols be made available to those who are in positions to aid in the prevention and management of elder abuse so that they are able to intervene in a safe and effective manner.

When designing programs to educate professionals, curriculum planners look to the literature to find examples of previous educational interventions, evidence of effectiveness of their methods, and lessons learned so that they may build upon others' experiences. However, to enable replication of successful elements, programs must be described in adequate detail to be useful to readers (Meurer, 1997)

Objectives

This systematic review synthesizes the current literature on educational interventions aimed at promoting the recognition of and response to situations of elder abuse and neglect. The results from this review will help to inform the development and evaluation of elder abuse educational modules for health care professionals, first responders, and other aging service providers.

The specific aims of this study are:

- 1) To describe the educational interventions designed to improve recognition and reporting of elder abuse and neglect and cite evidence of effectiveness.
- 2) To identify the success-predicting characteristics of these programs that can be used to inform the development of educational modules for professionals.
- 3) To analyze the content of current literature and summarize program descriptions for readers hoping to replicate successful models.

Methods

Search strategy

A comprehensive literature search was performed to identify all evaluation studies of educational interventions for health care professionals, first responders, and aging service

providers aimed at increasing the recognition of or response to elder abuse and neglect. The PubMed database was searched using the MeSH term “elder abuse” and all resulting citations were carefully reviewed to identify relevant articles. Additional studies were identified through hand searching the annotated bibliographies on the National Center on Elder Abuse website (www.ncea.aoa.gov), the personal reference database of a faculty expert in the field of domestic violence, and the references of relevant studies.

Inclusion and exclusion criteria

Upon review of titles and abstracts from the citations identified by the literature search, full text articles were obtained for all potentially relevant studies. Inclusion criteria were developed *a priori* and were:

- 1) The target audience must include health care professionals (e.g. physicians, home health nurses), first responders (e.g. emergency medical personnel, law enforcement), and/or aging service providers.
- 2) The educational intervention under study was aimed at increasing awareness, knowledge and/or reporting of elder abuse in the community.
- 3) Some form of evaluation data was provided.

Studies of interventions aimed at reducing abusive behaviors (e.g. where the professional is the assumed perpetrator) were not included, nor were studies focused on the prevention of abuse in an institutional setting like a nursing home. Articles describing a curriculum or program without any form of outcomes data were also excluded. Only English-language articles were included. Three different reviewers independently screened all studies for inclusion eligibility using a standard form and discrepancies were resolved by consensus.

Content and Validity Assessment

All articles were assessed for validity using two different methods. The first method involved utilizing an instrument developed by Meurer and Morzinski (1997) based on the CIPP (Context, Input, Process, and Product) evaluation model described by Stufflebeam (1989) to assess whether the article described the intervention and evaluation with enough detail for it to be reproducible and useful for the reader. Articles were assessed for their inclusion of 21 critical program components in four CIPP domains (see Table 1). A content analysis was conducted using a 3-point scale (not mentioned, mentioned, or described) for 19 of the 21 critical components. Investigators subjectively evaluated the two remaining components by determining congruence between needs and goals/outcomes by using a yes/no binomial scale.

The second method involved performing an assessment to determine whether the described outcomes were meaningful, valid and replicable. Outcomes measured included participant satisfaction, change in knowledge or attitude, change in behavior, and impact (e.g. numbers of new reports or impact at the patient level). The assessment further categorized outcomes as either an objective outcome measure or a subjective measure.

Analysis of data

Descriptive methods were used to summarize the literature content. Study results are described qualitatively because of the wide variation in methods, target audiences and forms of evaluation.

Results

The search strategy yielded over 1800 citations, of which 48 appeared relevant according to titles and abstracts. Of the 48 articles reviewed by the three investigators, there were initial disagreements on the inclusion of three articles for an inter-rater reliability of 94%. The disagreements were easily resolved by consensus after brief discussion. The final sample included fourteen articles (see Figure 1).

Characteristics of included studies

Out of the 14 included articles, ten focused specifically on elder abuse prevention while four described broader training programs that included an elder abuse component. Of the ten that focused primarily on elder abuse, three studies described six programs for physicians-in-training (Health, 2002; Jogerst, 1997; Uva, 1996) and one targeted an entire hospital staff (Kohm, 1996). Five programs targeted allied health professionals and aging service providers like APS workers, case managers, senior association staff and volunteers (Anetzberger, 2000; NCEA, 2002; Richardson, 2002; Teitelman, 1999; Vinton 1993). Only one study targeted emergency medical service providers (Seamon, 1997). Of the four studies that described broader training programs, one described an experiential domestic violence training program for practicing physicians, including both elder and child abuse (Shefet, 2007); two programs trained dental professionals to recognize all forms of domestic abuse (Chaffin, 2002; Harmer-Beem, 2005); and one described an integrated geriatrics track within a formal social work degree program that included an elder abuse component (Saltz, 2007). Most interventions took the form of brief training seminars that ranged in length from one hour to three days. Many physician training programs described integrated hands-on experiences with APS workers. For the majority of these studies, subjective evaluations were gathered in the form of participant reaction and feedback or in the form of self-reported changes in knowledge or behavior. Three of thirteen articles used objective measures of knowledge change to evaluate the intervention (Richardson, 2002; Seamon, 1997; Vinton, 1993). Increased APS referral rates were described in two articles but actual data were not provided (See Table 2).

Content and Validity Assessment

A frequency distribution shows the components of the CIPP model that were described or mentioned in the program reports (Figure 2). Most articles included a description of the problem and program goals as part of the background and significance, but rarely included a description of resources or leadership support. Input items were best described, including details of the curriculum, evaluation plan and target audience, while details of actual process of implementation were less often mentioned. Most lacking were items in the Product domain, as evaluation data were often poorly described or limited to participant reaction. Interestingly, studies with the strongest evaluation methods lacked details in the intervention

description. All studies described goals that were congruent with the identified needs. These goals usually reflected improving knowledge and reporting of elder abuse. While evaluation measures were often limited to reactions, comments and self-assessed competence, they were generally consistent with these goals

Study findings

A summary of findings from included studies, arranged by target audience, is described below. Details of each program are included in Table 2.

Target audience: Physicians and Hospital Staff—Three included studies described six distinct programs focused on educating physician residents or fellows in emergency medicine, family medicine (n=2), internal medicine, obstetrics/gynecology, and geriatrics (Heath, 2002; Jogerst, 1997; Uva, 1996). Five of these programs integrated resident training with Adult Protective Services (APS) activities either through home visitation (Heath, 2002; Jogerst, 1997) or through participation on a geriatric assessment team (Uva, 1996). A didactic orientation session preceded the home visitation activity for one program which provided learners with an overview of elder abuse definitions, epidemiology, and reporting requirements before being sent out into the field (Heath, 2002). Residents who went on home visits reported learning important practical skills such as how to determine the decision-making capacity of elderly patients, assess the home-environment for safety, and perform medication and functional health assessments (Jogerst, 1997; Shefet, 2007). The integrative nature of these programs allowed APS social workers and residents to develop a shared understanding of the benefits of teamwork. Residents learned about the steps following a filed report and APS workers gained insight into the value of physicians as consultants (Heath, 2002; Jogerst, 1997). Only the program for emergency medicine (EM) residents used a didactic training session as the sole form of education (Uva, 1996).

One study described a domestic violence experiential training program for physicians that included branches in child abuse, intimate partner violence and elder abuse (Shefet, 2007). This program utilized simulation techniques with standardized patients in which physicians took part in two staged scenarios and watched four other scenarios through a one-way mirror. Interactions were recorded on camera, and participants received group and individual feedback on their performance. Fifteen one-day workshops (five on elder abuse) were administered with a total of 150 participants (data combined for all three branches). Pre/post self-assessment questionnaires demonstrated increases in perceived capabilities, reported case management behaviors, and reporting practices, and a decrease in perceived barriers to intervention and self-assessed psychological difficulties in dealing with abused patients.

Kohm⁶ (1996) described a series of staff training sessions attended by over 700 professional and non-professional hospital staff members on a series of new abuse policies and protocols. Educational content was based on a local assessment of the needs of hospital staff from various departments. Session content included an overview of abuse, review of policies and procedures, group discussions on case studies and a video showing. More intensive workshops were team-taught by members of the hospital's abuse task force along with an

abuse survivor. While the entire program was reported as “favorably viewed”, participants particularly valued personal accounts by the abuse survivor

Lessons Learned—Physician training programs that utilize patient cases and hands-on active learning with real or standardized patients appear to result in improved knowledge and perceived ability to manage and appropriately refer elder abuse cases. Participation in a case-based didactic training program resulted in higher self-assessed knowledge and confidence in recognizing and reporting elder abuse, which persisted one year following training. Home visit programs and partnership with APS workers to provide direct interaction with abuse victims, hands-on care and team-based services, was a powerful experience for residents, particularly when accompanied by background didactics and debriefing opportunities. One study demonstrated a significant difference in self-assessed confidence and knowledge among residents who participated in a home visit program when compared with those who graduated before the program was implemented. For other programs, evaluations were not quantitative; however, residents and APS partners expressed enthusiasm with the programmed interactions. Residents also expressed a greater appreciation of the broad range of living and care situations and limited access to medical services that some patients experience as well as general feelings of shock from witnessing different cases of abuse. APS partners can also serve as a source of external performance assessments for residents’ skills, attitudes and behaviors.

While lessons learned from the program targeting hospital staff cannot be broadly generalized because the search strategy only yielded one study within this category, several strengths are apparent in the Kohm study. The integration of personal accounts as part of the training, much like the resident training programs, was appreciated by learners as a valuable experience. Also, the localized needs assessment performed by researchers during the development phase ensured that the information provided in the training was relevant and translatable to actual practices.

Target audience: Allied Health Professionals, Aging Service Providers and First Responders—Two articles in this category describe training for dental professionals (Chaffin, 2002; Harmer-Beem, 2005). Both embedded recognition and response to elder abuse into a broader training program and used a predefined Prevention of Abuse and Neglect through Dental Awareness (PANDA) curriculum, which covers family violence at all ages. Participants reported an increased awareness of regulations, knowledge, and likelihood of making a report.

One article (Seamon, 1997) described a 45 minute video training aimed at educating prehospital personnel on elder abuse and neglect. A total of 60 emergency medical services (EMS) personnel attended the course. Change in knowledge was measured by a test which showed a significant increase in correctly marked answers of 40% on the pre-test to 83% following training. Participants recommended the use of more color photographs, more case examples of different types of abuse, provision of the local APS phone number, and more information on laws that apply to paramedics.

Several articles describe training sessions for social workers and Adult Protective Services (APS) professionals. One details the implementation of a new geriatric curriculum for a graduate degree at a school of social work (Saltz, 2007).¹² Teitelman (1997) described a lengthy elder and adult sexual abuse educational session for APS workers in Virginia. The sessions, six hours per day for three consecutive days, began primarily as didactic but became increasingly experiential and interactive with small group discussions, demonstration of assessment aids, and several videos. There was no mechanism for formal assessment of the learning or behavior outcomes from the training sessions. However, the sessions were evaluated at 4.78 out of 5 for quality and usefulness. Evaluative comments stated that they provided useful, appropriate and current information on adult sexual abuse.

Finally, Anetzberger (2000) described an APS-targeted program designed to improve collaboration between Adult Protective Services and the Alzheimer's Association (AA) in Cleveland, Ohio. Investigators saw the need for more cross referrals and reporting between the APS and AA because of the association between dementia and risk for elder abuse and self-neglect. The educational content consisted of three required modules: a full day of training on dementia for the APS staff, a full day of training on elder abuse for the AA volunteers, and a half day training session bringing APS and AA staff and volunteers together. Following the session, participants reported significant increases in understanding of elder abuse and willingness to collaborate. Tracking of APS referrals from the AA revealed an over four-fold increase in the number of referrals in the year following the training than in the previous ten years combined.

Lessons learned—Participant feedback indicate that multi-media instruction facilitates a more valuable learning experience. The use of colored photographs, real case examples, and videos were beneficial. Content that provided locally-relevant information complete with phone numbers and applicable laws and statutes were appreciated by learners. Cross-discipline training, such as the one between APS workers and the Alzheimer's Association, can promote or strengthen partnerships through new or existing networks. Curriculum development would likely require more resources than single agency in-service training but this study suggests that the learning benefits may outweigh the extra effort.

Target audience: Mixed Audiences—In the only randomized study identified, investigators compared the effectiveness of a face-to-face education course versus printed educational materials (Richardson, 2002) in improving management of abuse of older people. Nurses, care assistants and social workers were randomly assigned to either attend an educational session or receive printed material with the same content given in the course. While details of the intervention are not provided, validated tools were used to assess objective changes in knowledge (through responses to vignettes), attitudes toward demented patients, and professional burnout. Participants in the face-to-face educational course demonstrated improved knowledge scores after the intervention, while those with the printed material deteriorated. Knowledge increase was greatest among those with the lowest pre-intervention scores.

Vinton (1993) described a Florida-based program aimed at nurses, aides, respite workers, case managers and others. Seven identical half-day training sessions were held for 142

participants, consisting of videos, lectures, handouts and case discussions on elder abuse. All occupational groups showed an improvement in knowledge on a 13 item pre/post test. Ninety-three percent of participants rated the session as excellent and 90% strongly agreed that the information would be important to others in their field.

In their final report, the National Committee on Elder Abuse (2002) described six different coalition projects with three common goals: 1) identify and assist isolated elders who may be at risk of abuse and neglect, 2) recruit and train individuals in the community as sentinels to recognize and report abuse and 3) raise awareness of professionals and the public about elder abuse and neglect. The projects, each supported through a small NCEA grant, were designed to train “sentinels,” to spot signs of abuse in local community dwelling elders and refer them for services. Sentinels trained included Meals on Wheels and Humane Society volunteers, postal workers and law enforcement officers as well as many others. The training methods varied but most included videos during a didactic session. Many products (PowerPoint presentations, handouts, lectures, placemats, grocery bags, etc.) were produced by the different grant recipients. A total of 1280 sentinels were trained and qualitative measurements of satisfaction and learning were made. Some coalitions claimed an increase in APS referrals in their communities after the training (data not provided) and provided anecdotal evidence of impact, including the story of a postal worker who, after receiving the training, saved the life of an elderly man

Lessons Learned—Richardson’s comparative study provides evidence that interactive sessions are more beneficial than print material dissemination. In fact, recipients of the print material experienced deterioration in knowledge. Interactive sessions give learners opportunities to ask questions, engage in discussion and learn from one another’s experiences. All studies have shown that some form of interaction facilitates a successful learning environment. Results from the sentinel projects indicate that even programs with modest funding can create a significant impact on the community when project goals are clear and tangible. In addition to oral presentations and video showings, providing low cost, easily distributed products that learners can take away with them, such as pocket cards, placemats and grocery bags, may reinforce the take-away message after the event.

Discussion

A search of published literature on elder abuse and neglect shows that efforts to educate professionals and paraprofessionals do exist. Most interventions are aimed at increasing participant awareness and knowledge of elder abuse with the overall objective of increasing elder abuse reporting.

The programs were each unique in their methodology of information dissemination; however, only one study performed a comparison of methods to determine the most effective (Richardson, 2002). The results of this study showed that face-to-face didactic sessions were significantly more effective at meeting learning objectives than disseminating printed information alone. Some studies used videos in combination with lecture or relied on a video alone, but no methodological comparisons have been done to determine the effectiveness of

videos versus face-to-face disseminated information in changing participant knowledge and behavior.

Included educational programs had some interesting features which could prove useful when developing innovative curriculum. As recognition and response to elder abuse is a difficult and potentially disturbing issue to address, interactive teaching techniques seem to be most impactful, particularly if opportunities for discussion and feedback are provided. Standardized patient cases with supervised practice and feedback are well received by physician trainees, and result in improvements in attitudes, knowledge and practice. In other programs, participants appreciated the involvement of actual abuse survivors as group facilitators, or in videos that feature local, personal accounts of elder abuse and local experts and professionals in the field. Physician residents found home visits eye-opening, and valued opportunities to hear first-hand accounts of abuse and neglect and to see and take part in the assessment of these patients. Interaction with local professionals and community members who are dealing with abuse enables trainees to actualize the reality of a problem that their involvement can powerfully impact.

Using the published literature as a guide to developing new curriculum continues to be a challenge. As shown in the content validity assessment, many of the articles do not give enough process details for the programs to be replicable. Details, such as whether attendance was required or whether barriers were encountered during actual implementation, were often absent from the articles. This lack of information may make it difficult to determine the best way to motivate participants to learn about elder abuse or impossible to side-step problems that could have been predicted by earlier studies. Likewise, details on program outcomes were also often absent. Only two articles tracked APS referral rates to determine if education changed their behavior or had an impact on abused elderly patients in their community (Anezberger, 2000; Heath, 2002).

The use of a guiding model, such as the CIPP model used here, might help authors to frame an evaluation report in a way more useful to readers hoping to replicate the programs. Further, such a model helps evaluators to look beyond reaction outcomes to consider ways to measure actual behavior change or impact (e.g. reporting rates). There are many reasons why authors may not report the details of an educational intervention, including space limitations and journal priorities. Yet there is much to learn from the work that has come before. New program designers may wish to seek more information about existing relevant programs directly from their authors in order to learn from their experience.

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References

1. Anetzberger GJ, Palmisano BR, Sanders M, Bass D, Dayton C, Eckert S, Schimer MR. A Model Intervention for Elder Abuse and Dementia. *The Gerontologist*. 2000; 40(4):492–7. [PubMed: 10961038]

2. Chaffin J, Richter P. Making Prevention of Abuse and Neglect through Dental Awareness Green. *Military Medicine*. 2000; 167(11):920–2. [PubMed: 12448618]
3. Harmer-Beem M. The Perceived Likelihood of Dental Hygienists to Report Abuse Before and After a Training Program. *Journal of Dental Hygiene*. 2005; 79(1):1–12. [PubMed: 16297308]
4. Heath JM, Dyer CB, Kerzner LJ, Mosqueda L, Murphy C. Four Models of Medical Education about Elder Mistreatment. *Academic Medicine*. 2000; 77(11):1101–07.10.1097/00001888-200211000-00007 [PubMed: 12431919]
5. Jogerst GJ, Ely JW. Home Visit Program for Teaching Elder Abuse Evaluations. *Family Medicine*. 1997; 29(9):634–9. [PubMed: 9354870]
6. Kohm C, McNally MJ, Tiivel J. Abuse Policies for Healthcare Institutions. *Leadership*. 1996; 5(5): 36–9. [PubMed: 10161457]
7. Lachs MS, Williams CS, O'Brien S, et al. The mortality of elder mistreatment. *J Am Med Assoc*. 1998; 280:428–32.10.1001/jama.280.5.428
8. Meurer LN, Morzinski JA. Published Literature on Faculty Development Programs. *Family Medicine*. 1997; 29(4):248–50. [PubMed: 9110159]
9. National Center on Elder Abuse. National Elder Abuse Incidence Study: Final Report. American Public Health Services Association; Washington, D.C.: 1998.
10. NCEA (Project Director: Aravanis, S.). Sentinels: Reaching Hidden Victims-Project Final Report. National Center on Elder Abuse; Washington, D.C.: 2002.
11. Richardson B, Kitchen G, Livingston G. The effect of education on knowledge and management of elder abuse: a randomized controlled trial. *Age and Ageing*. 2002; 31(5):335–41.10.1093/ageing/31.5.335 [PubMed: 12242194]
12. Saltz Corley C, Davis P, Jackson L, Stuart Bach M. Spirit of Aging Rising: Cross-Cutting Thematic Modules to Enrich Foundation Graduate Social Work Courses. *Journal of Gerontological Social Work*. 2007; 48(3-4):299–309. [PubMed: 17210534]
13. Seamon JP, Jones JS, Chun E, Krohmer JR. Identifying Victims of Elder Abuse and Neglect: A Training Video for Prehospital Personnel. *Prehospital and Disaster Medicine*. 1997; 12(4):269–73. [PubMed: 10179205]
14. Shefet D, Dascal-Weichhendler H, Rubin O, et al. Domestic violence: a national simulation-based educational program to improve physicians' knowledge, skills and detection rates. *Medical Teacher*. 2007; 29(5):e133–e138.10.1080/01421590701452780 [PubMed: 17885965]
15. Stufflebeam, DL. Evaluation models: viewpoints on educational and human services evaluation. Kluwer-Nijhoff Publishing; Boston: 1989. The CIPP Model for program evaluation.
16. Summers, RW.; Hoffman, AM., editors. Elder Abuse: A Public Health Perspective. American Public Health Association; Washington, DC: 2006.
17. Teitelman JL, O'Neill P. Elder and Adult Sexual Abuse: A Model Curriculum for Adult Services/ Adult Protective Services Workers. *Journal of Elder Abuse & Neglect*. 1999; 11(3):91–100.
18. Uva JL, Guttman T. Elder Abuse Education in an Emergency Medicine Residency Program. *Academic Emergency Medicine*. 1996; 3(8):817–19. [PubMed: 8853681]
19. Vinton L. Educating Case Managers About Elder Abuse and Neglect. *Journal of Case Management*. 1993; 2(3):101–5. [PubMed: 8130747]

Figure 1.
Search Strategy Results

Figure 2.
Frequency of inclusion of CIPP elements in published evaluation reports

Table 1

Categories evaluated for inclusion (based on CIPP model)

Context	
1. National problem to be solved	
2. Local needs/ needs assessment	
3. Explicitly articulated program goals	
4. Evidence of leadership/ institutional support	
5. Tangible resource support	
Input	
6. Instructional methods to be used	
7. Planned evaluation component	
8. Stakeholder input into curriculum	
9. Trainees and their selection	
10. Instructors and their credentials	
Process	
11. Record of actual instructional process	
12. Trainee attendance/ participation	
13. Barriers during implementation	
14. Evidence of program revisions	
Product (Outcomes)	
15. Participant satisfaction measures	
16. Learning outcomes	
17. Behavioral outcomes	
18. Impact/ long term outcomes	
19. Cost or cost/benefit analysis	
Congruence Measures	
20. Congruence between needs and goals	
21. Congruence between goals and evaluation measures	

Characteristics of Studies of Educational Interventions to Improve Recognition and Reporting of Elder Abuse (EA) among Health Professionals, Allied Health Workers and First Responders.

Table 2

Article	Target Audience/Setting	Nature of Intervention	Form of Evaluation	Findings
Interventions Targeting Physicians and Hospital Staff				
Heath (2002)	Residents in 4 geographically distinct Family Medicine (FM), Internal Medicine (IM), Ob/GYN, and Geriatrics Programs.	Partnership with APS provided opportunities to perform in-home assessments or consult as part of an inter-disciplinary team to discuss difficult cases of EA referred from the APS. Also included background readings, didactic and debriefing sessions.	Learned Reaction and Objective Learning and Behaviors by APS partners: Method not described; results reflect primarily reaction data. In 2 settings, APS workers assess trainee performance of humanism, team skills, attitudes and behaviors – data not provided.	Residents expressed enthusiasm with the interactions and a greater appreciation for the broad range of living situations, circumstances, and limited access to medical services that some patients experience. Enhanced attitudes and skills of residents reported, including assessing decision-making capacity and negotiating plans of care.
Jogerst (1997)	46 Residents at a Phoenix FM residency program between 1985 and 1992 received intervention; Comparison data from 44 residents who graduated 1977-1984.	As part of a required 1-month Geriatrics rotation, residents performed home visits with APS workers to evaluate patients for EA and capacity, including evaluation of the environment and functional health of their elderly patients.	Reaction and Self-Assessed Learning: Surveys mailed to all 90 residency graduates, with 79% return. Data included practice characteristics, self assessment of Geriatrics abilities (e.g. capacity evaluation, home environment, EA).	Of those who participated in the home visit curriculum, 92% agreed that the program was a valuable learning experience, and reported higher geriatric abilities than control (mean scores for “comfort in diagnosing elder abuse” on 5 point Likert scale = 4.02 for intervention group, 3.46 for control; p<0.01).
Uva (1996)	31 Residents (PGY1-PGY3) at a Midwestern community hospital-based Emergency Medicine (EM) residency program.	50-minute didactic session on epidemiology, definition, categories, risk factors and demographic profile of EA, clinical cases with photographs and educational video. Residents taught reporting requirements, how to report EA, and given a guidelines packet.	Self-Assessed Learning: Randomized pre/post survey of knowledge and confidence, with 1-year follow-up by telephone.	Improved confidence in recognizing EA (27% to 100%) and knowing how to report EA (17.6% to 100%). 35% had seen EA in the ED; 20% had reported EA. At 1 year follow-up, all reported that they could recognize and report EA.
Schlet (2007)	150 physician volunteers recruited nationwide from wide range of specialties including pediatrics, FM, geriatrics, IM and gynecology.	3 different 8 hour workshops, each focusing on either intimate partner violence, EA or child abuse. Workshops used standardized patients (SP) in 8 different scenarios. Physicians encountered 2 recorded scenarios and actively viewed 4 other scenarios via a one-way mirror. Feedback from the SPs and observers immediately followed.	Self-Assessed Learning and Objective Referrals: Self-assessment questionnaire at baseline and follow up 6 months post. Measured perceived capabilities, reported case management and perceived intervention barriers. Also assessed reported detection and referral rates.	Significant improvement in perception of knowledge and skills, routine screening frequency and reported case management. Trend to elevation in detection, evaluation and referral rates was also found. Significant decrease in lack of knowledge, skills and psychological difficulties as intervention barriers at follow up as compared to baseline.
Kohm (1996)	Over 700 professional and	One hour seminars held over 6 months	Reaction and	Responses were highly favorable, with

Article	Target Audience/Setting	Nature of Intervention	Form of Evaluation	Findings
	non-professional staff members of a Toronto Hospital.	taught hospital EA policies, based on a previous needs assessment of hospital staff. More intensive workshops were held for members of high-risk departments. Sessions included overviews of abuse, review of policies and procedures, group discussions on case studies and a video. More intensive workshops were team taught by members of the abuse task force and an abuse survivor.	Self-Assessed Learning: Evaluations of the educational session were via surveys distributed afterwards testing knowledge, skills and attitudes towards abuse. Data not reported.	requests for additional sessions; participants greatly valued hearing an EA survivor's account. Team invited to create additional hospital policies as a result. Further details of outcomes not provided.
Allied Health Professionals, Aging Service Providers and First Responders				
Anetzberger (2000)	All APS and Alzheimer Association (AA) staff and volunteers (n= unknown) in Cleveland, Ohio.	Educational content consisted of three modules, the first being a full day of training on dementia for APS staff; the second a full day of training on EA for the AA volunteers, and the third was a half day training session bringing the APS and AA together. Training was mandatory for all staff and volunteers of the APS and AA, and everyone attended.	Self-Assessment/APS Referrals: Pre/post evaluations of knowledge, attitudes and behavior; and APS referral rates from AA staff and volunteers; Anecdotal reports of cross-referrals and consultations following training.	Knowledge and willingness to collaborate increased following training. Referrals from AA to APS increased fourfold in the year following the training compared to previous 10 years combined.
Seamon (1997)	60 emergency medical services (EMS) personnel in Kent County, Michigan.	45 minute training video on EA and neglect.	Objective Learning: Pre and post test knowledge-based questions.	Pre/post test scores increased after training from 40% to 83% (p<0.05).
Teitelman (1999)	APS Workers in Virginia (n = 18 in pilot, then disseminated statewide: n = unknown)	For three consecutive days, six hours each day, APS workers learned about adult sexual abuse. The sessions begin primarily as didactic, but become increasingly experiential and interactive with small group discussions, demonstration of assessment aids, and several videos.	Learner Reaction: Course evaluations include measures of quality and usefulness; methods not described.	The sessions were rated 4.78 out of 5 for quality and usefulness and evaluative comments state that they provided useful, appropriate and current information on adult sexual abuse. Comments reflect changes in attitudes and increased awareness.
Chaffin (2002)	254 dentists and dental staff in the U.S. Army Dental Command	One-hour based upon the PANDA (Prevent Abuse and Neglect through Dental Awareness) curriculum on family violence (not limited to EA).	Self-Assessed Learning: Pre/post questionnaire with 3-4 items	Participants reported an increase in awareness of army regulations regarding family violence; 17% of participants claimed that they may have missed possible cases of abuse in the past.
Harmer-Beem (2005)	26 Dental Hygienists in New England attending a seminar.	Continuing education program on abuse (all ages) using the PANDA curriculum and the University of Minnesota Family Violence: An Intervention and Training Model for Dental Professionals. Details not given.	Self-Assessed Learning: Pre/ post 10-item, three category Likert scale instrument measuring likelihood of recognizing and reporting suspected abuse and neglect.	Increase in participants reporting they knew how to make a report (40% to 96%), and were likely to make a report (40 to 100%) after attending the training session
Saltz (2007)	Graduate social work students	EA integrated as one of 3 cross-cutting themes in an established graduate social work program. Each quarter, students received 1- week of geriatrics training, including case vignettes, handouts, exercises, suggested readings and bibliographies.	Process evaluation only: Only a description of the new curriculum was given. Process evaluations were used to revise program. No learner evaluation reported.	Implementation challenges were encountered primarily around scheduling. No learner outcomes reported.
Mixed Audiences				

Article	Target Audience/Setting	Nature of Intervention	Form of Evaluation	Findings
Richardson (2002)	86 nurses, care assistants and social workers working with older people, and employed by a local community health trust in London, England.	Participants were randomly assigned to either attend an educational session (Group I; n=44) or receive printed material with the same content as the course (Group II; n=42). Programs targeted identification and management of all types of EA based on policy, practice guidelines and procedures which were operational in both health and social services.	Objective Learning: Knowledge and management questionnaire (KAMA), including 7 open-ended vignette-based questions; the Maslach Burnout Inventory (MBI); and Attitude of Health Care Personnel towards Demented Patients (AHCDDP).	Baseline and follow-up data available for 81% of participants. KAMA scores improved in Group I and deteriorated in Group II (+3.7 vs. -2.9 respectively; $p<0.001$). AHCDDP and MBI scores did not change in either group, but reflected positive attitudes and low burnout at baseline.
NCEA (2002)	1280 "sentinels" (i.e. people who have frequent contact with at-risk elders) in 6 coalitions, including Meals on Wheels and Humane Society, etc. 7,650 received outreach materials.	Training methods varied but each had the same goals of 1) identifying and assisting isolated elders at risk of abuse and neglect 2) recruit and train individuals in the community to be sentinels and 3) raise awareness about EA and neglect. Most of the training sessions included videos during a didactic session. Many products (PowerPoint presentations, handouts, lectures, placemats, grocery bags, etc.) were produced by the different coalitions.	Self-Assessed learning, Objective APS Referrals: Coalition projects used several methods of evaluations. These include: pre/post telephone public awareness survey, pre/post reporting and referral rates to APS, availability of needed services, participant narrative comments.	Some coalitions reported an increase in APS referrals in their communities after the training. In one program, after training, 39 EA cases reported by social workers; 5 EA cases reported by postal workers, including one whose life was saved as a result; (baseline comparison not given). Using local people in video lent credibility and authenticity. Term "elder-watch" was preferred over "abuse" or "maltreatment."
Vinton (1993)	142 participants in rural, 14-county area of north Florida: case managers, personal aides, respite workers, nurses, nurses aides, social workers, law enforcement and administrators.	Seven identical half-day training sessions consisting of videos, lectures, handouts and case discussions on EA held at senior citizen's centers, schools or other easily accessible community buildings. Content included background, prevalence, theories of elder abuse, legal mandates, and role and operation of APS.	Learner reaction and Objective Learning: Pre/post questionnaire with 13 knowledge-based items, and 5 Likert scale reaction items pertaining to quality of the session.	Overall, pre/post knowledge scores increased from 71.5% to 81.3% ($p<0.001$). All occupational groups showed an improvement in correct answers from pre to post test, with 93% of participants rating the session as excellent and 90% strongly agreeing that they believed that the information would be important to others in their field.

Table 3

Validity assessment/ Content analysis: elements included in project evaluation report

Article	Context					Input					Process					Product				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
CIPP category →	++	++	+	++	--	++	+	--	++	+	+	--	++	--	++	++	--	--	+	
Heath (2002) ⁴	++	++	+	++	--	++	+	--	++	+	+	--	++	--	++	++	--	--	+	
Jogerst (1997) ⁵	++	--	+	--	--	+	++	--	+	++	++	++	--	--	++	++	++	+	--	
Uva (1996) ¹⁸	++	--	+	--	--	+	++	--	++	+	++	+	--	--	+	++	--	--	--	
Schifet (2007) ¹⁴	++	+	+	+	--	++	++	--	+	+	++	+	--	--	++	++	++	++	--	
Kohm (1996) ⁶	++	++	++	+	++	++	+	++	+	++	++	++	--	+	--	--	--	--	--	
Anetzberger (2000) ¹	++	++	++	++	++	++	++	++	++	++	++	++	--	++	--	++	++	++	--	
NCEA (2002) ¹⁰	++	--	++	--	++															
Cayuga City						++	--	--	+	--	+	--	++	--	+	--	--	--	--	
Lifespan						--	--	+	+	--	--	+	++	--	--	--	+	+	--	
Orange County						++	--	--	+	--	--	++	+	--	++	--	--	--	--	
Six County						+	+	++	+	++	--	--	++	--	++	+	--	+	--	
Sonoma County						--	--	--	+	--	--	+	++	--	--	++	--	+	+	
Yuma City						+	--	--	+	--	--	+	++	--	--	--	--	+	--	
Richardson (2002) ¹¹	+	++	++	--	--	+	++	--	++	--	--	++	--	--	--	++	--	--	--	
Seamon (1997) ¹³	++	--	++	--	--	++	++	++	++	--	--	++	--	+	++	++	--	--	+	
Teitelman (1999) ¹⁷	++	++	++	++	+	++	--	++	+	--	++	--	--	+	++	+	--	--	--	
Vinton (1993) ¹⁹	++	+	++	+	++	+	++	--	+	++	++	++	--	++	++	++	--	--	--	
Chafin (2002) ²	++	++	++	+	--	+	++	--	+	--	--	--	--	--	--	++	--	--	--	
Harner-Beem (2005) ³	++	--	++	--	--	--	++	--	++	--	--	--	--	--	--	++	--	--	--	
Saltz (2007) ¹²	++	++	++	+	++	++	+	+	++	+	+	+	++	++	--	--	--	+	--	

++ = well described, +=mentioned, --- if not included at all