Effect of Education on Recognition of Elderly Abuse and Successful Use of Screening Tools:

A Systematic Review

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Abstract

Aim. This paper is a report of a systematic review conducted to compare standard education protocols to the utilization of formal screening tools for elder abuse, which would require additional formal training for health care professionals.

Background. Practitioners are being faced with more complex issues within the geriatric population than ever before. The recognition and reporting of elder abuse is a problem that has not received much attention. Elder abuse receives very little attention in nursing school curriculum. The United States lacks a consistent definition, tool, or treatment guideline for clinicians who encounter elder abuse.

Data sources. An extensive search was conducted for the period 1988 to 2010 using Ovid MEDLINE, CINAHL, EBSCOhost plus, and Cochrane Review databases. Keywords included: abuse, mistreatment, neglect, domestic violence, older, old, elderly, elder, screening, guidelines, primary care, nurse practitioners, physicians, reporting, education, training, and risk factors. Twenty-five articles were identified as meeting inclusion criteria.

Method. All current forms of abuse screening were utilized including in-office questionnaires, face-to-face interviews, telephone screening, and physical assessments in an attempt to identify commonalities and efficacy amongst current methodologies and practice.

Results. The review found little evidence providers are receiving additional education on elder abuse, and what impact education has on the use of currently available tools.

Conclusion. Further research would be beneficial to determine the most practical and efficacious approach for educating providers in addressing elder abuse in primary care settings.
Summary Statement

What is already known about this topic

- The problem of recognizing and reporting elder abuse is an issue that has not received much attention.
- Elder abuse lags behind other forms of abuse, such as child abuse, in terms of mandatory reporting.
- Elder abuse remains widely underreported and its management is highly variable and inconsistent among health professionals.
- Currently, 1-2 million Americans 65 years of age or older have been victims of some recognized form of abuse.
- Nursing school curriculums devotes minimal time to the issue of elder abuse.

What this paper adds

- There is a general consensus that more education is needed in the recognition, management, and reporting of elder abuse.
- There is little evidence that providers are receiving additional education on recognizing elder abuse.
- The affect of additional education on the efficacy of available elder abuse screening tools is uncertain.

Implications for practice and/or policy

- The comprehensive nature of the primary care setting provides a unique opportunity for early recognition and intervention, possessing great potential for reducing the problem of elder abuse.
- There are ethical, legal, and moral consequences of being unable to recognize victims of elder abuse, this leaves practitioners with a professional obligation to stay educated on the topic.

Keywords: elder abuse, screening, primary care, education, guidelines, and systematic review
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Introduction

The role of the primary care provider is undoubtedly multifaceted. With the ever aging population, healthcare professionals are being faced with more complex issues within the geriatric population than ever before. An issue that has not received much attention is the problem of recognizing and reporting elder abuse. The comprehensive nature of the primary care setting provides a unique opportunity for early recognition and intervention, possessing great potential for reducing this problem.

The World Health Organization (WHO) defined elder 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.” Abuse was further defined into four categories: physical, psychological, financial, or neglect (WHO, 2002). There has not been a clear distinction for what the term elderly means and this concept varies widely among different societies and cultures, as recognized by the WHO in 2002. For the purpose of this review “elderly” refers to the term recognized by Western societies, in conjunction with the WHO’s 2002 report on violence and health, as any person 65 years of age or older.

Within the last several years, there has been increasing awareness of the incidence of abuse amongst special populations, most notably in the fields of child and domestic abuse. This has lead to a decline in overall incidence, and the creation of several resources to assist these vulnerable groups. Abuse of elderly persons has not, however, seen such promising advances even with several states requiring mandatory reporting of such cases. According to a 2003 study, published in the American Journal of Public Health, elder abuse not only remains widely
underreported but the treatment is highly variable and inconsistent among health professionals throughout the United States (Jogerst, et al., 2003).

Current research estimates that 1–2 million Americans 65 years of age or older have been the victim of some recognized form of abuse (National Research Council Panel, 2003). In fact, for every elder abuse case reported to authorities there are a minimum of five more that remain unreported (National Center on Elder Abuse, 1998). In 2005, the National Center on Elder Abuse proposed that it is impossible to determine the actual extent of elder abuse because the nation currently lacks a uniformed national tracking system. As a result, the vast majority of elder abuse cases remain unreported.

Although many states require mandatory reporting, the nation still lacks a consistent definition, tool, or treatment guidelines for primary care practitioners who encounter elder abuse (Anetzberger, 2001; Levine, 2003; Jogerst, et al., 2003; Shugarman, Fries, Wolf, & Norris, 2003; Neno & Neno, 2005; Yaffe, Wolfson, Lithwick, & Weiss, 2008;). Furthermore, practitioners receive little or no additional training about the recognition of elder abuse (Anetzberger, 2001; Neno & Neno, 2005). Meeks-Sjostrom (2004) noted this lack of formal training impairs the practitioner’s ability to recognize and treat elder abuse appropriately, despite a legal and moral obligation to do so.

The Review

Aim

Due to the evident need and inconsistent recognition and treatment of elder abuse, a systematic review of current literature was performed in order to answer the following questions:

1. Does additional training of primary care providers impact the recognition, reporting, and intervening in potential elderly abuse cases?
2. Do current available tools require additional training and education to administer effectively?

This study aims to compare standard education protocols to the utilization of formal screening tools for elder abuse, which would require additional formal training for health care professionals.

Design

A systematic review of literature was conducted on English articles published on the subjects of elderly abuse screening and provider knowledge. Articles were reviewed for information on whether amount or presence of education had an impact on elder abuse knowledge and recognition. Additionally, articles were reviewed for the use of elder abuse screening tools and how training impacted the tools use and efficacy. All current forms of abuse screening were utilized including in-office questionnaires, face to face interviews, telephone screening, and physical assessments in an attempt to identify commonalities and efficacy amongst current methodologies and practice.

Search Methods

The search engines utilized included: Ovid MEDLINE, CINAHL, EBSCOhost plus, and Cochrane Review. The review focused on articles published between January 1988 and September 2010. Key words used included: abuse, mistreatment, neglect, domestic violence, older, old, elderly, elder, screening, guidelines, primary care, nurse practitioners, physicians, reporting, education, training, and risk factors. The terms were searched independently as well as in combination with each other. Reference sections of available works were reviewed for further publications.
Inclusion criteria

Articles were only included if they:

- Were published in English
- Discussed screening tools
- Discussed potential risk factors
- Discussed commonly occurring objective signs
- Revealed information on the impact of practitioner’s level of knowledge in relation to ability to identify and appropriately report abuse
- Were applicable to primary care settings and primary care providers.

Exclusion criteria

Articles were excluded if they:

- Focusing solely on self-neglect
- Predominately applicable to cases of self-neglect, inpatient settings, or either nursing or ancillary staff
- Were anecdotal articles or opined commentary.

The combined total of articles yielded from the initial search was 592. After reviewing for exclusion criteria, 79 articles were left for further review. Twenty-five articles met the initial criteria for inclusion in order to identify elder abuse screening tools being utilized in practice and the impact of additional provider training on their efficacy (Figure 1).

Results

Review of current literature revealed several studies in agreement that elder abuse education should be improved in current medical and advanced nursing practice curriculums (WHO, 2002; Meeks-Sjostrom, 2004; Sandmoe, 2007). Further evidence of this was supported
in a study by Woodtli and Breslin (2002), which found that elder abuse received the least amount of attention in current nursing curriculum with 45%, of 408 nursing schools surveyed, reporting only 2-4 hours of standard elder abuse education and 46% nursing programs providing one hour or less of elder abuse training. Lithwick, Beaulieu, Gravel, and Straka (1999) noted that the likelihood of properly identifying abuse in the elderly population depended on “sensitized, educated, and well-trained” practitioners (p. 109). Review of the current literature found that despite a widespread agreement of need, limited quantitative data exists regarding the actual impact of supplemental education on a practitioner’s ability to recognize elder abuse (Table 1). Furthermore, many of the tools currently available either require additional training for proper utilization or have not been studied comparatively amongst those receiving additional training as opposed to those receiving standard education.

**Benefit of Education**

A 1993 study by Balaswamy (as cited in Anetzberger, 2001) supported the benefit of additional education finding a number of healthcare professionals remain unaware that elder abuse exists, either because they were new to the healthcare profession, or reported receiving little to no formal training within the standard curriculum. This Ohio based study determined out of 154 practitioners (physicians, nurse practitioners, and social workers) surveyed, the majority reported receiving no additional training on elder abuse identification or current adult protective services (APS) law. As a result, the study found 70% of these respondents had difficulty detecting abuse and 51% were confused about current state laws. Additionally, the authors surveyed five of the state’s county based agencies, and found 63% of the agencies did not utilize any tools for elder abuse identification, and 88% denied having available protocols to facilitate reporting of this problem.
Another study completed by Kennedy (2005) involved a mailed survey of 2000 American family doctors and internists. Results of this study found that 72% of the respondents reported receiving no training on elder abuse identification. Of the respondents 63% had either never or almost never asked about abuse and over 50% had never recognized a case. The overall mean results of their assumptions regarding the prevalence of abuse fell under 25% of the standard published values (Kennedy, 2005).

In support of the above findings, current literature evidenced higher investigation rates in states requiring mandatory reporting of elder abuse cases; however, the effectiveness of this reporting was dependent upon the ability of the reporter to recognize its occurrence (Jogerst et al., 2003). There has been significant disagreement among researchers as to the most appropriate time, setting, and method for elder abuse screening, and what the most efficacious training approach would be (Yaffe et al., 2008).

Iowa is currently the only state requiring mandatory education for professionals who must report abuse, as identified in a study comparing investigation rates between Iowa and Texas, a state which mandates reporting abuse but requiring no additional education (Jogerst, Daly, Dawson, Brinig, & Schmuch, 2003). According to this study, Iowa has not seen an increase in reporting rates by healthcare providers since implementing required training in the form of a two hour conference. On the other hand, the state of Texas has seen increased rates of reporting since implementing mandatory reporting laws, irrespective of requiring additional formal training in the area of abuse. Jogerst, Daly, Dawson, and others (2003) noted this may be due to the fact that Texas, unlike Iowa, has separate investigative agencies for child and adult abuse, which according to the authors may be more beneficial than simply requiring formal training alone.
The positive effects of increased knowledge and additional training on elder abuse recognition were substantiated, however, in a study by Desy and Prohaska (2008). This study implemented a geriatric emergency nursing education (GENE) course to baccalaureate prepared nurses and advanced practice nurses in an emergency room setting. Pre and post test results were obtained to assess knowledge gained as well as any improvement in ability to accurately administer the mini mental state exam (MMSE), Fulmer’s SPICES, geriatric depression scale, elder abuse and neglect assessment, and the confusion assessment method (CAM). This additional training course resulted in an overall knowledge increase of 18% in the area of common geriatric issues and tests, 55% increase in reported utilization of skills in recognizing signs of elder abuse and neglect, and a 95% increase in perceived ability to assess and utilize available tools specific for elder abuse and neglect. While this study was directed at emergency room nurses the applicability to private settings is probable in that the initial baccalaureate and master’s nursing education is consistent respectively.

To identify the most advantageous educational approach, a randomized controlled trial by Richardson, Kitchen, and Livingston (2002) compared the effectiveness of in-person training to distribution of printed materials. Their study showed higher learning scores were achieved by attending an educational seminar (83.9%) as opposed to receiving written materials (15.2%). This phenomenon was also evidenced in an article by Nagpaul (2001), in which attending a training session explaining available tools and protocols was found to be significantly more effective than self-training through written materials. A similar study comparing additional education for medical residents, in the form of small group teaching sessions about proper assessment and recognition of caregiver stress, also yielded higher post test scores among attendees (Famakinwa & Fabiny, 2008).
A literature search conducted by Erlingsson, Carlson, and Saveman (2003) identified a consensus within literature towards a preference for checklists to identify risk indicators for abuse in busy clinical settings. These authors go on to question, however, whether a checklist can be used properly without prior training in elder abuse recognition. The authors cite several sources for classifying this lack of education as a barrier to detection (Erlingsson et al., 2003). Hirsch, Stratton, and Loewy (1999) also emphasize the need for additional education in order to distinguish an elder person’s presenting symptoms as signs of normal aging or actual abuse.

Conversely, Thompson-McCormick, Jones, Cooper, and Livingston (2009) argued too little teaching may inspire a false confidence among healthcare professionals in their ability to identify abuse. These authors conducted a study on the ability of medical students to recognize elder abuse. A comparison of students with real world experience (worked as a professional carer, provided family/friend help or support, personal life contact with someone with dementia, or previous clinical exposure to someone with dementia) to students receiving only lecture based learning showed a significantly higher recognition capability amongst those possessing real world experience. These authors suggest that increasing opportunities for real world problem solving may essentially be the most effective method for elder abuse education.

**Review of Tools**

As previously mentioned, and validated throughout the review, a single standardized tool has yet to be implemented for everyday use by primary care providers and each tool used differs in the amount of training, or lack thereof, required. Little statistical evidence regarding the impact of additional and required training is evident in current research; therefore, review of the educational requirements for available tests was necessary. Five tools were repeatedly identified
during the literature search and appear to be most commonly used within current practice settings (Table 2).

The first tool evaluated, The Indicators of Abuse Assessment (IOA) is a 22 item questionnaire that involves questions directed toward both the caregiver and care receiver. Interpretation is simple in that the higher the score, the higher the likelihood of abuse. Strengths of this tool, as cited by Meeks-Sjostrom (2004) include its high validity (78-84% identified cases), simple scoring, and rapidity of which it can be performed. The author goes on to note healthcare providers require 2-3 hours of training in order to properly administer this tool and results are largely influenced by the administrator’s perceptions. A study by Reis and Nahmiash (1998) determined the presence of similar strengths for this instrument and concluded the identification of abuse is possible with a reliable tool. Nevertheless professionals must be experienced and properly trained before administration to maintain tool validity. This would have to be done in a continuing education format, as neither introduction to this tool or the subsequent training required are present in current medical or nursing education.

The second tool most commonly identified during the literature search was the Elder Neglect and Abuse Instrument (EAI). This test involves a 44 item Likert type scale focusing on seven sections including signs, symptoms, subjective complaints of elder abuse, neglect, exploitation, and abandonment. Meeks-Sjostrom (2004) noted that this device can be utilized in all settings, is completed by the healthcare provider, and only takes approximately 12-15 minutes to complete. Reliability testing done by Fulmer, Paveza, Abraham, and Fairchild (2000) found the EAI to be 71% sensitive and 93% specific to the identification of elder abuse. Results are qualitative (no numeric score), and referral to social services is recommended if there is any evidence or subjective complaints of elder abuse (Fulmer, Guadagno, Dyer, & Connolly, 2004).
Fulmer and others (2004) also noted that the EAI may be beneficial in busy clinical settings because extensive training is not required. Lacking in the available research on the EAI, however, is the impact of the practitioner’s own perceptions, clinical judgment, and educational background on the proper utilization of this tool and whether further education would influence reliability.

The Brief Abuse Screen for the Elderly (BASE) contains only five short questions and takes less than one minute for the practitioner to complete (Anetzberger, 2001; Fulmer et al., 2004). Practitioners must also receive additional training prior to administering this tool and studies have found an 86-90% agreement among trained practitioners when the BASE is used in clinical settings. Unfortunately for comparison, validity results of untrained professionals are not present in the literature. Great potential benefit exists for use of the BASE in busy clinical scenarios. Researchers have remained undecided, however, as to how widespread training of practitioners should be completed, which has impeded generalized use of the BASE (Fulmer et al., 2004).

The Hwalek-Sengstock Elder Abuse Screening Test (H-S/EAST) is another commonly used instrument. This is a 15 item tool that is quick, easy to complete, and considered beneficial in busy clinical settings (Fulmer et al., 2004). One disadvantage is this test has not shown to be effective in distinguishing actual abuse from other types of elder mistreatment (Fulmer et al, 2004). Physical abuse, degree of vulnerability, and potentially abusive situations are all measured by this tool (Hwalek & Sengstock, 1986). Further studies of this tool completed by Scofield, Reynolds, Mishra, Powers, and Dobson (1999) condensed this instrument to a 6 item rapid screening assessment, potentially increasing its applicability to a busy practice. Review of available literature also found this tool to have the fewest syllables and lowest required reading
ability (6th grade level), increasing its usefulness amongst certain populations (Daly & Jogerst, 2005). Despite its common use, however, evidence is once again lacking regarding the impact of additional education on the proper administration of this tool.

Lastly, the American Medical Association (AMA) Diagnostic and Treatment Guidelines on Elder Abuse and Neglect was frequently identified in the literature. This assessment tool is intended to serve as a guideline for clinicians and aims to incorporate closed ended questions into the patient’s history and physical examination (Fulmer et al., 2004). These guidelines include flowcharts for both screening and management of elder abuse cases, though the lengthiness of the tool, the absence of recommendations for follow-up, and the lack of empirical data regarding its effectiveness are significant disadvantages (Fulmer et al., 2004). Though additional education is not required for its use, the lack of sensitivity and specificity data make substantiation of this tool difficult, though this is a widely used reference.

Of additional importance, there is existing literature questioning the potential of improved screening tools and provider recognition in decreasing overall abuse rates. An article by Nelson, Nygren, McInerney, and Klein (2004) noted that The U.S. Preventative Services Task Force in 1996 determined there was insufficient data to support or oppose routine screening for family or intimate partner violence. These authors further caution the potential adverse effects of screening due to the lack of an instrument with 100% sensitivity and specificity, which may result in false positives and have severe implications (Nelson et al., 2004). Ultimately, Nelson and others (2004) determined that while individual elder abuse programs and identification tools exist, there is a gap in data regarding effective interventions, management, and health outcomes measures (Nelson et al., 2004).
Discussion

Overall, 25 articles were identified which discussed the recognition of elder abuse and the impact of additional education for practitioners. Of these, five (20%) compared the most common available tools and their corresponding education requirements, five (20%) discussed an overview of the situation and identified barriers to reporting elder abuse, and three (12%) involved the development or proposal of a new tool or teaching program. Twelve (48%) were research studies with seven (28%) of these studies involving an intervention, five (20%) cross-sectional studies, two (8%) randomized controlled trials, and three (12%) were qualitative.

Twenty-three (92%) of the articles being reviewed either advocated for or substantiated the benefit of additional education to increase professional recognition of elder abuse. Two (4%) of the articles (Jogerst et al., 2003; Nelson et al., 2004) were unable to identify a link between education and improved screening on decreased cases of abuse. As mentioned throughout this review, there is ultimately limited empirical evidence on the benefit of providing supplemental education to improve recognition abilities of primary care providers. More research is warranted in order to quantitatively substantiate the benefits of providing additional provider education to combat this problem.

Research articles addressing the best method for providing additional training were in agreement that in-person training provided a higher level of learning among attendees, as opposed to the distribution of written materials alone (Nagpaul, 2001; Richardson et al., 2002). Tools administered by Desy and Prohaska (2008) and Famakinwa and Fabiny (2008) also showed participants attained higher scores after attending teaching sessions. This is highly suggestive of the benefit of comparing this method to standard education alone in further research studies, as the inadequacies of written materials may yield falsely low results.
Alternatively, comparison of in-person training, written materials, and standard curriculum alone would be another conceivably beneficial option for future research.

**Limitations of Review**

Ambiguity continues to exist over a standardized definition of elder abuse limiting consistent review of data. Yaffe et al. (2008) also noted that research has been impeded as a result of these inconsistencies. Despite creation of a generalized definition for elder abuse by the WHO in 2002, widespread standardization of this concept has yet to be achieved. This incongruity continues to be the first obstacle that must be overcome if accurate illustration and understanding of the complex issue of elder abuse is to occur.

Furthermore, with limited empirical evidence regarding the benefits of improved elder abuse education, a resolute conclusion of this matter is difficult to establish. Additional data is needed to demonstrate the practicality of implementing education and determining its actual necessity in clinical practice. Since much of the prior research has taken place in institutionalized settings, research involving the efficacy of elder abuse screening and training in private clinical settings would be very beneficial. Nevertheless, the outcome of many of these studies has shown to be potentially relevant to a variety of settings.

**Conclusion**

Elder abuse is a complex phenomenon. Despite advancements in the delivery of healthcare, elder abuse has remained largely under recognized and underreported. Primary care providers are in a unique position to recognize signs of abuse and intervene prior to the escalation of abusive acts. There are ethical, legal, and moral consequences of being unable to recognize these victims leaving practitioners with a professional obligation to stay educated in this field. Ultimately, this review found little evidence that providers are receiving additional
education on identifying elder abuse, whether it aids in recognition of elder abuse, and what impact education has on the use of currently available tools to identify elder abuse. Further research would be beneficial to determine the most practical and efficacious approach for educating providers to constructively address elder abuse in primary care settings.
References


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<td>Famakinwa &amp; Fabiny (2008)</td>
<td>40 Medical residents in 3 hospitals</td>
<td>Pre-post test</td>
<td>Teaching handout and a 1 hour training session</td>
<td>Teaching about caregiver stress significantly increased knowledge and elder abuse recognition</td>
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<td>Richardson, Kitchen, &amp; Livingston (2002)</td>
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<td>General lack of knowledge of managing elder abuse; educational seminars superior to printed materials in increasing knowledge</td>
</tr>
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<td>Thompson-McCormick, Jones, Cooper, &amp; Livingston (2009)</td>
<td>202 4th year medical students in London and Birmingham</td>
<td>Cross-sectional cohort self-report questionnaire study</td>
<td>Completed the Caregiving Scenario Questionnaire</td>
<td>Students good at recognizing non abusive cases, but not at recognizing actual abuse. Past caregiver experience increased recognition</td>
</tr>
<tr>
<td>Desy &amp; Prohaska (2008)</td>
<td>102 emergency nurses</td>
<td>Evaluation research with repeated measures</td>
<td>Attended an 8 hour geriatric emergency nursing education course</td>
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</tr>
<tr>
<td>Kennedy (2005)</td>
<td>216 family physicians; 176 internists</td>
<td>Cross-sectional cohort self-report</td>
<td>8 page questionnaire mailed to a random sample</td>
<td>More education on elder abuse needed. Family physicians were more aware of problem, willing to report and manage.</td>
</tr>
<tr>
<td>Assessment Tool</td>
<td>Description</td>
<td>Validity</td>
<td>Reliability</td>
<td>Education Required</td>
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<tr>
<td>Indicators of Abuse</td>
<td>22 item Likert</td>
<td>Demonstrated validity identifying 78-84% of abuse cases in one study</td>
<td>Cronbach’s alpha of .92</td>
<td>2-3 hrs</td>
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<tr>
<td>Elder Abuse and Neglect Assessment</td>
<td>44 item Likert</td>
<td>Sensitivity 71%; Specificity 93%; content validity index of .83</td>
<td>Cronbach’s alpha of .84</td>
<td>1-2 hr</td>
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<td>AMA Diagnostic and Treatment Guidelines for Elder Abuse and Neglect</td>
<td>Closed ended questions during H&amp;P exam</td>
<td>Lacking empirical data</td>
<td>Lacking empirical data</td>
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<td>15 item</td>
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<td>Cronbach’s alpha of .29</td>
<td>Evidence lacking on impact of additional education</td>
</tr>
<tr>
<td>Brief Abuse Screen for the Elderly</td>
<td>One page questionnaire</td>
<td>86-90% agreement between trained practitioners</td>
<td>Lacking reliability data</td>
<td>Paired with training in abuse recognition</td>
</tr>
</tbody>
</table>

Table 2 Description of Screening Tools
Figure 1: Flow diagram of the search process.

- 592 Articles retrieved
- 79 Articles after exclusion criteria considered
- 25 Articles after inclusion criteria met
- 13 Considered tools
  - Compared tools
  - Discussed situation and identified barriers
  - Involved development or proposal of a new tool or teaching program
- 12 Research studies
  - 7 Involved interventions
  - 5 Cross-sectional studies
  - 2 Random-controlled trials
  - 3 Qualitative analyses