Elder abuse and neglect: A survey of pharmacy students’ opinions, experience, and knowledge

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Abstract

Purpose: To determine pharmacy students’ awareness of state reporting laws for elder abuse and neglect (EAN) and recognition of the signs and symptoms. An additional purpose was to understand whether education on EAN was needed in the pharmacy curriculum. A voluntary survey was distributed to 365 third- and fourth-year pharmacy students; 328 were returned with usable data. The questions on EAN were organized into three general areas: opinion, experience, and knowledge.

Results: With regard to opinion, 98% of responding students felt that identifying EAN was important, and 76% felt that educational content about EAN should be included in the curriculum. Only 23.4% of responding students felt adequately trained to report a case of suspected EAN. While 24% of responding students had suspected a case of EAN at some point in time, only 1.8% had ever reported a case of EAN. Moreover, 44% of responding students correctly identified that Illinois law required them to report a suspicion of EAN, 7.3% answered no, and 48.6% did not know. Other sections investigated whether pharmacy students were familiar with the culture of EAN and able to identify common signs and symptoms of EAN. Overall, 60% correctly identified family members are more often abusers than strangers; 92.3% correctly identified that dementia makes an older adult more vulnerable to abuse.

Conclusion: Overall, this study found a need to educate pharmacy students on the issue of EAN. Pharmacy students must be aware of the signs and symptoms to detect EAN. They must also understand reporting responsibilities.

Keywords: Pharmacy education; Geriatrics; Curriculum; Elder abuse and neglect; Mandated reporting

Introduction

In the United States, the “Baby Boomers” have a significant effect on national demographics. The number of Americans aged 65 years or older numbered 43.1 million in 2012. This represented an increase of 7.6 million or 21% since 2002. By 2040, the number of older persons will be about 79.7 million.¹ With this segment of the population growing, the problem of elder abuse and neglect (EAN) warrants attention.

States define elder abuse according to their unique statutes, and definitions vary from state to state.² Researchers and health care disciplines have also identified the problem but with some variation. Common characteristics include the action be intentional, cause harm or serious risk of harm, and involve a vulnerable older person. Some definitions also stipulate a special relationship exist between the perpetrator and victim, for instance, where there is the expectation of trust. In general, the major types of elder abuse include physical, emotional, sexual, financial, and neglect. Self-neglect may be more common than any other form of abuse or neglect by others. The term refers to
refusal or failure to provide oneself with the goods or services to meet basic needs.\textsuperscript{2,3}

Studies have reported a range in the incidence and prevalence of EAN. In the National Elder Mistreatment Study, one in ten community-dwelling adults 60 years or older reported some type of abuse (excluding financial) in the past year. The prevalence by abuse type was 5.1\% for potential neglect, 4.6\% for emotional abuse, 1.6\% for physical abuse, and 0.6\% for potential sexual abuse.\textsuperscript{2} In a second national study, 3005 community-dwelling persons aged 57–85 years were asked about their experience with mistreatment in the past year. The most commonly reported abuse was verbal. Overall, 9\% of respondents reported being insulted or put down by a family member.\textsuperscript{4} More recently, the New York State Elder Abuse Prevalence Study reported a one-year incidence rate of 7.6\% for any form of elder abuse found. Financial exploitation in the year preceding the survey was the most common form of mistreatment reported by respondents. This study estimated that only 1 in 24 cases came to the attention of programs and authorities.\textsuperscript{5} Victims may be unwilling or unable to acquire help. They may fear of retaliation from the abuser or believe there is no safer alternative to their current situation.\textsuperscript{6,7} Barriers to reporting EAN among health care professionals include a lack of knowledge in recognizing and reporting, concern about the legal ramifications, and fear of losing patient trust.\textsuperscript{6} Perpetrators of EAN are more often family members rather than strangers.\textsuperscript{3} The complexity of the EAN is due, in part, to underreporting.

All health care professionals should see themselves as responsible for addressing EAN. With a mindset of collective responsibility to report suspected EAN, more victims can be identified and intervention can begin. Pharmacists have been referred to as gatekeepers who can meet the pharmaceutical needs of older adults but also watch for their safety.\textsuperscript{7} The American Bar Association assembled comparison charts of reporting requirements by state statutes, current as of December 2006.\textsuperscript{8} By individual state Adult Protective Service laws, pharmacists are explicitly identified as mandatory reporters in ten states; however, the statutes governing reporting are complex. Multiple states require “any person” who suspects abuse to make a report, and pharmacists obviously fit within this condition. Finally, pharmacists may fit within broader, non-specific categories of other states’ statutes such as “health care practitioners.”\textsuperscript{8} These references to pharmacists, whether specific or broad, implicate pharmacists in the majority of states as mandatory reporters. Illinois law requires pharmacists to report suspected elder abuse; however, mandatory reporting only applies if the person thought to be abused is unable to make a report. A potential influence on health care professionals’ detection and reporting rates of EAN is the instruction received on the topic during their training programs.

In this article, the authors describe a survey administered to pharmacy students at Midwestern University (MWU) Chicago College of Pharmacy. The survey items related to students’ experience, opinions, and knowledge of EAN. The topics covered included the following: prevalence, types of abuse, risk factors, consequences, and the reporting process. Prior to the study design, a review of the literature was conducted to learn of previous studies of health care professionals and/or students as it relates to knowledge of EAN. Dental and medical students as well as physical therapists were among the study populations found.\textsuperscript{5–11}

Review of the literature

A survey was administered to 291 first- and second-year dentistry students at the University of California, Los Angeles.\textsuperscript{9} The instrument consisted of questions in the following areas: prior training and education in geriatrics and elder abuse, perceptions of the culture of EAN, and knowledge of mandated reporter legal responsibilities and protections. Only 6\% of responding students reported ever receiving training on elder abuse. With regard to general perceptions of the issue of elder abuse, the students’ level of knowledge varied. Students understood that EAN takes place. Overall, 67\% answered false to the statement “Abuse and neglect of older adults are rare” and 84\% answered false to the statement “Mistreatment in later life only happens to people who are very frail.” However, there was greater uncertainty with other statements. A majority of students (57\%) answered unsure to the statement “Most abuse of older adults occurs in nursing homes.” Survey results also revealed a lack of knowledge of the reporting process itself and the protections that are guaranteed to mandated reporters. Information from the study resulted in the development of curriculum units on EAN inserted throughout the educational program.\textsuperscript{9}

In the discipline of medicine, 202 fourth-year students at the University College London and the University of Birmingham, UK, were surveyed on their recognition of elder abuse in a dementia patient.\textsuperscript{10} A fictional vignette introduced the patient and then students were asked to classify 13 responses for managing her behavior as abusive or not-abusive. The authors concluded that the students were successful at recognizing not-abusive care, for example, arranging an identification bracelet and asking a doctor about medication that might help the situation. In contrast, students were not as effective at recognizing abusive care. Only 14\% and 56\% of responding students, respectively, identified accepting someone was not clean and locking someone in alone as abusive. Of interest, teaching about elder abuse did not always correlate with the ability to identify abusive care.\textsuperscript{10}

A third publication describes the extent of elder abuse knowledge among 118 physical therapists in Michigan.\textsuperscript{11} In the first part, common signs or symptoms of physical abuse were presented. The average number of correct answers on these ten statements was 7.2. Of the responding students, 92\% and 94\%, respectively, identified untreated injuries and
inconsistent wound locations as a common sign or symptom. With regard to awareness of state mandatory reporting laws, the average number of correct answers on five questions was 3.8. The highest scoring question with 93% correct responses was “As a physical therapist in Michigan, does the law require you to report cases of suspected elder abuse”? The lowest scoring question with 67% correct responses was “In order to file a report of abuse, do you have to give your name and title as a physical therapist”? The authors concluded that continued professional education is needed to help physical therapists identify which patients may be victims of elder abuse and what the reporting process entails.11

Methods

The Institutional Review Board at MWU granted approval for this exempt study in February 2011. The participants were pharmacy students in their third and fourth professional years in the College of Pharmacy. The objectives of the study were to determine how pharmacy students define EAN with regard to signs and symptoms and to identify their knowledge of the reporting responsibilities of pharmacists. An additional purpose was to understand whether education on EAN was needed in the pharmacy curriculum. The study consisted of a paper-based survey five pages in length. Students were administered the voluntary survey during a required course for which attendance was mandatory. A cover letter distributed with the questionnaire described the intent of the survey, stated that the survey was not related to coursework in the program, and expressed appreciation for participation. Respondents were given an envelope in which to seal their survey after its completion. It took approximately 15 minutes to complete.

The survey instrument was developed, in part, on the basis of previous surveys of health care professionals with the same purpose of measuring students’ knowledge of EAN and the mandatory reporting requirement.7,10 Only the questions were modified to be applicable to pharmacists. Like these other disciplines, it was important to understand if gaps in training or experience existed among pharmacy students. Other items were developed by the authors after a review of the literature. Measurements of opinion, experience, and knowledge regarding EAN were assessed. Demographic information was also gathered in the last part of the survey. The majority of the questions included an explicit “don’t know” response choice for respondents who had no preference or had not thought about a particular issue.

Experience was established by three close-ended questions. The sequence of the questions was considered carefully. That is, the students were first asked if they had ever suspected a case of EAN and then if they had ever reported a case of EAN. Students were also asked if they had ever received education on EAN. Students’ opinions were ascertained by asking four questions concerning their feelings on EAN. The survey opened with “Do you feel that identifying EAN is important?” Next, students were asked if it is the responsibility of a pharmacist to report suspected EAN and whether students should receive education on the topic in the pharmacy curriculum. Students were forced to choose between the opposites yes or no for the question “If you had to report a case of suspected EAN, do you feel adequately trained to do so?” The reason for this specific design was the survey authors wanted to determine if prior education on EAN prepared students to make a report.

The final and largest set of survey questions covered pharmacy students’ knowledge about EAN and the reporting responsibilities of pharmacists. First, a series of six questions investigated the students’ awareness of the law, its requirements, penalties, and protections. Of note, the questions concentrated on Illinois law. States differ as to reporting requirements, and students who attend MWU may practice pharmacy after graduation from states outside of Illinois. The level of knowledge on the facts of EAN was assessed using 10 statements for which the correct answer was generally accepted. Students were required to answer as true, false, or unsure to each statement (Table 1). Finally, the concluding section was a listing of observations or behaviors, and the students were asked to identify those that

<table>
<thead>
<tr>
<th>Statement</th>
<th>True, % (n)</th>
<th>False, % (n)</th>
<th>Unsure, % (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abuse and neglect of older adults is rare</td>
<td>4 (14)</td>
<td>77 (250)</td>
<td>19 (62)</td>
</tr>
<tr>
<td>Neglect is the most common of elder abuse</td>
<td>79 (258)</td>
<td>4 (14)</td>
<td>17 (54)</td>
</tr>
<tr>
<td>Abuse of older adults occurs mostly in nursing homes</td>
<td>29 (96)</td>
<td>33 (109)</td>
<td>37 (120)</td>
</tr>
<tr>
<td>Family members are more often abusers than strangers</td>
<td>60 (195)</td>
<td>12 (39)</td>
<td>28 (91)</td>
</tr>
<tr>
<td>Abuse/neglect mostly happens to older adults who are frail</td>
<td>38 (125)</td>
<td>32 (103)</td>
<td>30 (98)</td>
</tr>
<tr>
<td>Dementia makes an older adult more vulnerable to abuse/neglect</td>
<td>92 (301)</td>
<td>1 (4)</td>
<td>6 (21)</td>
</tr>
<tr>
<td>Victims may not self-report abuse/neglect because of fear</td>
<td>92 (299)</td>
<td>2 (6)</td>
<td>6 (21)</td>
</tr>
<tr>
<td>The majority of elder abuse/neglect cases come to the attention of authorities</td>
<td>5 (18)</td>
<td>82 (267)</td>
<td>13 (41)</td>
</tr>
<tr>
<td>Abuse/neglect does not occur in some cultures because they respect their oldest members</td>
<td>42 (137)</td>
<td>34 (111)</td>
<td>24 (78)</td>
</tr>
<tr>
<td>Adult children who abuse/neglect parents are often dependent on the victims</td>
<td>46 (149)</td>
<td>15 (50)</td>
<td>39 (127)</td>
</tr>
</tbody>
</table>

Note: n for each statement varied from 325 to 326 responses. Percentages may not total 100% because of rounding.
are warning signs or symptoms of potential EAN. The material was adapted, in part, with permission using a survey of physical therapists’ knowledge of the signs and symptoms of physical abuse. Most observations or behaviors presented in the survey would be perceived as potential EAN; however, some indicators seen as ordinary were also included by the authors of the survey (Table 2). Respondents rated their level of agreement on a four-point Likert scale. There was no neutral response. End points for the scale were completely agree and completely disagree.

Data were entered into SPSS 22.0 and analyzed using the same software. Frequency distributions were evaluated for responses in the domains of opinion, experience, and knowledge. Chi-square test was used to compare the knowledge level of students who reported receiving education on EAN with those who did not.

Results

In all, 328 students provided usable data for an overall response rate of 90%. This included 162 and 166 third- and fourth-year students, respectively. Overall, 57% of the respondents were female. The ethnic background of the Classes of 2011 and 2012 was diverse but most commonly reported were Caucasian (37%) and Asian (32%). The median age of the respondents was 25 years, with a range of 22–40 years. The majority of the students (68%) indicated that they plan to practice pharmacy in Illinois after graduation. Of those who provided the information, California (10%) and Wisconsin (8%) were among the other states identified.

In the domain of experience, 18% of third- and 60% of fourth-year students reported having received education on EAN. Overall, 24% of respondents reported having ever suspected EAN. It was in contrast to find that only 2% had ever reported EAN. That is, most respondents did not intervene in this way to help persons that they had identified as victims.

Overall, the answers to the opinion-based questions were positive. The vast majority of students (98%) felt it is important to identify EAN, and 90% of respondents expressed that pharmacists have a responsibility to report suspected EAN. On the other hand, 8% did not feel this way. On whether students should receive education on EAN in the pharmacy curriculum, respondents answered as follows: 76% yes, 4% no, and 20% do not know. Of interest, 76% of the 312 survey respondents stated if they had to report a case of elder abuse today, they do not feel adequately trained to do so. Cross-tabulation analysis revealed this represented 69 students (55%) who received education on EAN and 169 students (91%) who did not.

Pharmacy students’ knowledge of the legal aspect of reporting was mixed. Nearly 30% of third-year and 58% of fourth-year students correctly affirmed that Illinois law requires pharmacists to report suspected EAN. Overall, 48% of pharmacy students indicated that they did not know that Illinois pharmacists are mandated reporters. In terms of needing to provide proof of the abuse, the vast majority of respondents (65%) did not know this question, in truth, to be no. And, cross-tabulation revealed students who received prior education on EAN did not perform significantly better on this question. The fact is, the investigating agency for suspected EAN would like to receive as much details as possible; however, hard evidence may only be uncovered during a formal investigation and by those charged with this responsibility. Illinois law protects the mandated reporter from civil and criminal liability. Survey results showed respondents were not well informed of this protection. Of the respondents, 68% did not know if family had the right to sue the pharmacist if a suspected case of EAN turned out to be false. Likewise, 66% of respondents did not know if pharmacists are granted immunity from criminal liability when making reports of EAN in good faith.

The survey contained a list of statements on the culture of EAN. Students were asked to answer true, false, or unsure to each statement. The authors found knowledge of dementia as risk factor for EAN to be a fact. A majority of respondents (92%) answered true to the statement “Dementia makes an older adult more vulnerable to abuse/neglect.” In addition, pharmacy students understood that EAN can be

<table>
<thead>
<tr>
<th>Signs/symptoms</th>
<th>Percentage correct (Agree–strongly agree) (%)</th>
<th>Percentage incorrect (Disagree–strongly disagree) (%)</th>
<th>Percentage No answer (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malnutrition</td>
<td>87</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Unexplained broken bone</td>
<td>82</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>Inappropriate/inadequate clothing for conditions</td>
<td>30</td>
<td>67</td>
<td>3</td>
</tr>
<tr>
<td>Poor personal hygiene (e.g., fleas or lice on person or fecal/urine smell)</td>
<td>86</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Lack of necessary medical aids (e.g., hearing aid or dentures)</td>
<td>73</td>
<td>24</td>
<td>3</td>
</tr>
<tr>
<td>Caregiver threatening an older adult with long wait for food until he or she remains quiet</td>
<td>91</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Unexplained disappearance of valuable possessions or funds</td>
<td>90</td>
<td>7</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: n for each statement varied from 317 to 324 responses. Percentages may not total 100% because of rounding.
a hidden problem. A majority of respondents (82%) answered false to the statement “The majority of abuse/neglect cases come to the attention of authorities.” Table 1 summarizes the data for the 10 statements.

The final section pertaining to knowledge was a listing of 19 observations or behaviors, and the students were asked to identify those that are warning signs or symptoms of potential EAN. Most observations or behaviors presented in the survey would be perceived as potential EAN; however, some indicators seen as ordinary were also included by the authors of this study. For example, unilateral arm bruise due to a blood draw and ankle sprain after tripping on throw rug were included but would not be immediately concerning for potential EAN. Table 2 shows the frequency distributions of responses for a selection of survey items.

**Discussion**

In many different ways, the topic of EAN can be introduced to pharmacy students in didactic education. Ideally, the favored approach is inclusion in the core curriculum. For example, the introduction of pharmacists as mandatory reporters may be suitably placed in a law course. A thorough review of the prevalence, types of abuse, risk factors, and complications may be positioned in an introductory geriatric lecture. Alternatively, a special presentation in an elective geriatric course would be an appropriate fit; however, not all students would benefit from the exchange of information. At MWU, the breadth of education on EAN continues to be within the elective geriatric course. The elective is typically offered annually. Since the study, the time and target audience changed to spring quarter second-year students. Of course, curriculum design is dynamic, and movement into the core curriculum is always a possibility.

Faculty teaching EAN need to be aware of the different learning styles of students and should instruct in a way that they will not only gain knowledge but comfort. Case-based format and video scenarios are of special interest as methods of delivery. The University of California (UC), Irvine Center of Excellence on Elder Abuse and Neglect worked with pharmacy educators including those from UC Irvine and University of Southern California to develop course materials on EAN for pharmacy students.7 The materials including objectives, slides, handouts, test questions, and written or video scenarios can be downloaded from the website free of charge for use in the classroom. Since the study, the video-training scenarios co-developed by UC, Irvine Center of Excellence on Elder Abuse and Neglect were incorporated into the EAN lecture at MWU. Anecdotally, multimedia teaching helped build the connection between EAN and how the pharmacist might observe the behavior. The visual images grabbed students’ attention and stimulated discussion. To accommodate this addition, the time allotted for the lecture was increased from one to two hours.

The source or extent of prior education on EAN was not recorded for any student citing this experience. If pharmacy students in the Class of 2011 had taken the elective geriatrics course, a 50-minute lecture on EAN was included. Based on registrar data, 115 students in the Class of 2011 were enrolled in the geriatrics elective in their third professional year; however, a record of actual attendance at the lecture on EAN was not available. In addition, whether these students were present on the study date and completed the survey is unknown. Absenteeism and tardiness to the mandatory class session precluded the instrument reaching the entire class population. Students in the Class of 2012 had not yet had the opportunity to receive the lecture on EAN. The discrepancy in the percentage of third- and fourth-year students reporting EAN education was, in part, attributed to exposure to the topic in the geriatrics elective. For this reason, sampling only the fourth-year students would have been less representative of the entire student population. The authors could not confirm if EAN had been introduced elsewhere in the pharmacy curriculum. Future surveys are needed to obtain a view of elder abuse education across colleges and schools of pharmacy in the United States. These surveys may include comparison of the results by geographic area, as well as the amount of time dedicated and methods used to teach the subject matter.

Nearly one-quarter of respondents reported having had a suspicion of EAN. The type of elder abuse was not elicited nor was the point in time during the students’ life when they may have suspected such abuse, for example, the event may have taken place before or during their pharmacy school career. To whom they reported the EAN was not asked, for example, parent, employer, or authorities. One way to address the discrepancy between education and lack of preparedness to report would be to role-play with scripts. One student acting as the observer of potential EAN would make the report to a second student acting as a representative of Adult Protective Services. The purpose of this research was not to identify barriers to reporting; however, pharmacy students showed uncertainty about the protections they are guaranteed as mandated reporters. This lack of knowledge has been cited as a barrier to report and reinforces the need to include this content in elder abuse education.

Most questions were adapted from previous studies of health care professionals; however, the exact pharmacy students’ survey was not reviewed by experts or pilot tested. The results of pharmacy students’ knowledge of signs and symptoms of elder abuse may have been different if more information was provided on which to base a decision. The authors did not complete an investigation on the relationship between students’ demographic data and the survey results. Cross-culturally, limited research suggests ethnic groups may differ in their perception of whether a situation is abusive.8
Conclusion

Geriatric education in colleges and schools of pharmacy needs to be a priority given the changing demographics of the United States. Arguably, pharmacy students require a baseline minimum competency in knowledge and skills to care for older adults.\textsuperscript{12} The argument that pharmacy students need education on detecting and reporting EAN is difficult to dispute. It is their ethical and legal responsibility as health care professionals. Elder abuse has been linked to higher hospitalization rates and increased mortality risk.\textsuperscript{13} The victims suffer emotionally and physically. The high frequency of contact with pharmacists presents the opportunity for reporting and detecting. Unfortunately, EAN education may not be integrated in pharmacy curriculum for reasons such as a lack of awareness or faculty champion for its inclusion.

Acknowledgment

The authors thank Janice Lee, Doctor of Pharmacy Student at Midwestern University Chicago College of Pharmacy, who provided assistance with writing and proof reading the manuscript.

References