Original Research

Preceptor preferences for participating in electronic preceptor development

Machelle DAVISON, Melissa S. MEDINA, Nancy E. RAY.

ABSTRACT[*]

Objectives: New guidelines require preceptors to deliver approximately 30% of the doctor of pharmacy curricula. With preceptor's increasing responsibilities, colleges are faced with the task of training preceptors as educators. Identifying preceptor's training format preferences (i.e. electronic vs. live) should contribute to the more effective and efficient creation of training materials and programs.

Methods: A preceptor training video was created and made available electronically and was distributed to 400 preceptors with a brief 2-part questionnaire about preceptor training preferences, electronic training preferences after viewing the video, and available technology resources for participating in electronic training.

Results: 38.25% of the questionnaires were returned. The majority of respondents (57%) preferred electronic to live preceptor developing training and the majority (53%) had not previously attended the live annual preceptor development conference offered by the college. 51.6% participants reviewed the electronic training video created by the OU College of Pharmacy. Of the respondents who did not watch the video, 73% cited having too little time, problems accessing the video, or technical reasons for not watching the training video. The majority of responders in all age groups preferred electronic training to face-to-face training except those ages 61-65 and the majority (55.7%) would participate in on-line training again in the future. The majority of respondents have the technical resources to participate in electronic training.

Conclusion: Preceptors have limited time to participate in preceptor development training, although they view training as an important activity. This study reveals three main findings: (1) the majority of preceptors prefer electronic preceptor development training programs regardless of age; (2) would participate in future electronic training after having participated in electronic training; and (3) have the available resources to participate in electronic training. Future preceptor development programs should have flexible formats to accommodate preferences for live and electronic programming.

Keywords: Education, Pharmacy, Graduate. Internship, Nonmedical. United States.

PREFERENCIAS DEL TUTOR EN PARTICIPAR EN EL DESARROLLO DEL TUTOR ELECTRÓNICO

RESUMEN

Objetivos: Las nuevas recomendaciones requieren que los tutores proporcionen aproximadamente el 30% de currículo del Doctor en Farmacia. Con el aumento de responsabilidades del tutor, las facultades se enfrentan a la tarea de formar tutores como educadores. Identificar las preferencias sobre el formato de la formación del tutor (p.e. electrónica vs. presencial) debería contribuir a la creación de materiales y programas educativos más efectivos y eficientes.

Métodos: Se creó un video de formación del tutor y se disponibilizó electrónicamente a 400 tutores con un breve cuestionario de 2 partes sobre las preferencias de formación después de ver el video, y los recursos tecnológicos disponibles para participar en formación electrónica.

Resultados: Se recibieron el 38,25% de los cuestionarios. La mayoría de los respondentes (57%) prefirió el desarrollo de formación para tutores electrónica que presencial, y la mayoría (53%) no había atendido anteriormente a la conferencia anual de desarrollo de tutores ofrecida por la Facultad. El 51,6% de los participantes revisó el video electrónico formativo creado por la Facultad de Farmacia de la Universidad de Oklahoma. De los respondentes que no habían visto el video, el 73% cito tener demasiado poco tiempo, problemas de acceso al video, u otros problemas técnicos para no haber visto el video formativo. La mayoría de os respondentes de todos los grupos de edad preferían la formación electrónica que la formación presencial, excepto los de edades de 61-65 años, y la mayoría (55,7%) participaría de nuevo en una formación on-line. La mayoría de los respondentes tiene los recursos técnicos para participar en formación electrónica.

Conclusión: Los tutores tienen un tiempo limitado para participar en la formación de desarrollo de tutores, aunque ellos consideren esta formación como importante. Este estudio revela 3 hechos

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principales: (1) la mayoría de los tutores prefieren la formación de desarrollo electrónica, independientemente de su edad; (2) participarían en futuras formaciones electrónicas después de haber participado en una formación electrónica; y (3) tienen los recursos necesarios para participar en la formación electrónica. Los futuros programas de formación de tutores deberían tener formatos flexibles para acomodarse a las preferencias de los programas presenciales o electrónicos.

Palabras clave: Educación de pregrado en farmacia. Internado. Estados Unidos.

INTRODUCTION

Preceptors play an important role in the education of students at most health professional institutions. With the shortage of pharmacists, the need to prepare more students for the profession and the steady increase in student numbers, and changing accreditation standards, the importance of this role is amplified.[1,2] While the need for preceptors increases, the need for efficient and effective preceptor training to ensure quality of pharmacy students' educational experiences also increases. From a study conducted by the Preceptor Development Task Force, 75% of the development programs offered to preceptors were live sessions.3 Although live sessions are the most common type of training format, it is unclear if this mode provides the most pervasive outreach to preceptors, especially to the new preceptors who need the most professional development to positively impact student learning outcomes. The Task Force also reported an average of 48.6% of new preceptors attended programs offered annually, while an average of 32.6% of experienced preceptors attended; revealing that less than half of the preceptors receive initial training and only one third of the experienced preceptors attend programs. Many of the respondents in this study also reported lack of time, staff, and resources as problems with preceptor development, therefore indicating live sessions may not be the best training option. Instead, the study recommended to create a variety of programs for either live or distance delivery and to update current material such as "Training Pharmacy Preceptors" to a web-based or CD-ROM format as a way to improve the preceptor development efforts.[3]

The use of technology to facilitate preceptor development efforts is emerging as an option to provide increased and flexible outreach to preceptors. An American Association of Colleges of Pharmacy (AACP) PEP-SIG task force examined preceptor development issues and recommended all preceptors be trained as educators, receive additional development support, and receive access to ongoing training in multiple formats (i.e. live programming, online resources, etc.).[4] They are encouraging programs to collaborate and pool resources to develop one system for all preceptor development training. One example is the Preceptor Education Program, an online educational program providing preceptor education and support for Australian affiliates. This program was developed through the collaboration between four schools of pharmacy and pharmacy professional bodies.[5] A second example, the Achieving Preceptor Excellence (APEX) program,, created by the University of Florida College of Pharmacy as a Community Preceptor Development Program, is a 15 hour web-based program (content provided via video streaming) that focuses on preceptor training and support to be available to all Colleges of Pharmacy.[6] While these efforts address new association recommendations (the development of technology driven training), they do not identify what barriers exist to on-line or technology driven training, such as preceptor's availability of computer resources to complete the training or preceptor preference of training format (i.e. on-line vs. live). Preceptor's training preferences and technology resources are important to identify because it may facilitate the development of more effective and efficient training materials and programs. This pilot study conducted with registered pharmacists who serve as preceptors at the University of Oklahoma College of Pharmacy investigated these issues at the College level.

Background

The University of Oklahoma (OU) College of Pharmacy is a four year (P1-P4) doctor of pharmacy program with approximately 130 students in each year and approximately 350 volunteer adjunct faculty preceptors and 50 full-time faculty preceptors (400 total). Students participate in introductory pharmacy practice experiences (IPPE) during the first 3 years of the curriculum. During the fourth year, students complete nine months of advanced pharmacy practice experience (APPE) which consist of spending one month at nine different sites. The IPPE's and APPE's are directed by preceptors who are composed of either full-time faculty at the college (compensated) or adjunct faculty/practicing pharmacists (non-compensated) at many different practice sites across the state. A large number of full time and adjunct pharmacy preceptors are required to successfully deliver the IPPE's and APPE's to each class. With this large number of preceptors, the delivery of training to pharmacy preceptors can be a challenge due to the disproportionate preceptor to trainer ratio. The Office of Experiential Education (OEE) is directly responsible for providing or facilitating training and employs a full time Director and two full time staff members (one covering the Tulsa area and one covering the Oklahoma City area) to accomplish this task. All new preceptors are required to take a written test over preceptor and pharmacy intern laws and to receive an on-site "orientation" by OEE staff including review of written materials that cover aspects of the experiential program. However, no mandatory training session or CE programs are required by our state board. The college has two primary methods for training preceptors. The first includes a written manual which is supplied to each preceptor on a yearly basis. The second is that all

college preceptors are invited to attend a yearly preceptor's conference (participation is voluntary and varies from year to year) sponsored by the College of Pharmacy, which addresses different topics every year such as the five skills of precepting, expectations of and evaluating and grading student performance, and innovations in pharmacy practice and student training.

Despite these two preceptor training methods (written manual and option live conference), many questions are presented to the Office of Experiential Education during the year from preceptors such as "how many interns can I have at one time?" These questions are received through phone conversations, e-mails and from the monthly site visits. They are critical questions (i.e. having too many students can affect a preceptor's ability to take students if they are cited by the Oklahoma State Board of Pharmacy for violation of Oklahoma laws). Not only do these preceptor questions most likely arise from a failure to read the preceptors training manual or attend the annual conference, the questions highlight the need for more flexible (electronic) access to preceptor development as recommended by the Preceptor Development Task Force and the AACP PEP-SIG.[3,4]

In order to accommodate the need for more flexible preceptor development, as well as enhance our program's existing resources, the College created a short supplemental online video to highlight common experiential education questions and topics. This article explores preceptor's preferences and available resources for electronic preceptor development training.

This pilot study was designed to address four objectives:

1. Quantify the amount of time preceptors perceive they have available for preceptor development/training

2. Identify preceptor development/training preferences for and participation in electronic vs. live programs.

3. Capture the number and demographics of preceptors who complete an offering of electronic preceptor development training and evaluate their preference for completing electronic preceptor development in the future as a result of this participation.

4. Categorize preceptor's available technology resources to complete electronic preceptor development training.

METHODS

Members from the Office of Experiential Education in conjunction with members from the Office of Instructional Sciences and Assessment at the University of Oklahoma collaborated to outline and develop an eighteen minute online training video that highlight important areas of experiential education and preceptor expectations. The video was meant to be a summary of key information found in the preceptor manual and was not designed to replace the importance of the manual. Topics covered in the video included: a history of the College, pharmacy law, student professionalism, and proper student orientation to training sites. The video was posted on the OU College of Pharmacy website on the Office of Experiential Education home page (http://pharmacy.ouhsc.edu/academic/experiential.asp). Quality, content, clarity, and usability of the video were tested with a pilot group consisting of two pharmacy students, three pharmacy faculty members, two staff members, one technician, and three outside individuals.

A preceptor training preference questionnaire was created and reviewed by a statistician for validity and reliability. The questionnaire received a rating of 0.841 using Cronbach's alpha test for reliability, which is used to assess the consistency of results across items within a test, where a good value is considered to be 0.70 or higher.[7] The paper questionnaire consisted of 2 parts: part 1: nine demographic type questions, six preceptor related questions, seven technology related questions, two related to electronic training preferences, and part 2: five related to training preferences as a result of viewing the online video and one open-ended question for additional comments. Questions specific to the video (part 2) were presented both online and on paper so that participants could instantly submit reactions to the video as soon as they completed viewing it. It was estimated that the questionnaire completion time was approximately 10 minutes.

After receiving IRB approval, a letter including the electronic link to the video and specific instructions related to the study, the questionnaire, and a postage paid self addressed envelope was sent to 400 registered pharmacists that serve as preceptors for the University of Oklahoma College of Pharmacy. Participation in the pilot study consisted of 2 parts. All 400 pharmacists were first asked to complete the first part of the questionnaire. All were then offered the opportunity to view the on-line video and complete part 2 of the questionnaire about their on-line training preferences as a result of viewing the on-line video. Therefore, preceptors could participate by completing questionnaire part 1 only or the questionnaire part 1 coupled with viewing the on-line training and completing questionnaire part 2. All preceptors were given 3 weeks to return the questionnaire part 1 and part 2 (if applicable). After the three week deadline, a second reminder letter with a copy of the questionnaire was sent with a 2 week deadline for responses. After responses were collected from the second reminder, the results were tabulated using descriptive statistics.

RESULTS

Response Rate and Respondent Demographics

One hundred fifty-three questionnaire responses were received giving a 38.25% response rate for the study. This is higher than the response rate of

comparable studies which reported rates that ranged from 26% to 31%.[8,9,10]

Descriptive statistics were used to analyze the demographic data of respondents. Table 1 shows gender, mean age by gender, mean years at their current site, and mean years of experience as a preceptor. As shown, 71% of participants were male and 29% were female. The gender results are comparable to the actual demographics of University of Oklahoma College of Pharmacy preceptors which is currently 59% male and 41% female. The mean age for male respondents was 47 and ranged from 26 to 70 years. The mean age for female respondents was 39 and ranged from 25 to 58 years. Table 1 also shows that male participants had been at the current site for a mean of 10 years and females had been at their current site for a mean of 7 years. Regarding years of experience as a preceptor, results show that males had about 13 years of experience as a preceptor and females had around 8 years of experience as a preceptor.

Table 1: Select Demographics of Respondents			
	Male	Female	Total
Gender	71%	29%	100%
Mean Age	46.56 (10.35)	39.07 (9.20)	44.35 (10.57)
Mean Years at current site	10.34 (8.77)	6.76 (6.60)	9.29 (8.33)
Mean Years of Experience as Preceptor	12.75 (9.37)	8.20 (7.92)	11.41 (9.17)
B.S. Degree	73% (79)	21% (23)	94% (102)
Pharm.D Degree	10% (11)	10% (11)	20% (22)
B.S. and Pharm.D Degrees	17% (18)	10% (11)	27% (29)
Practice Residency	5.5% (6)	4.6% (5)	10.1% (11)
Specialty Residency	4.62% (5)	6.48% (7)	11.1% (12)

Descriptive statistics were also used to compare gender and level of education. Table 1 shows that the majority of respondents (94%) had a bachelor's degree, 20% had a Doctor of Pharmacy degree, and 27% had both a bachelor's degree and Doctor of Pharmacy degree. There were no Doctor of Philosophy degrees reported. A small percentage (around 10%) had completed a practice residency and (around 11%) had completed a specialty residency.

Most participants in this study worked independently (26%) or in a hospital setting (28%) with the rest working in chain, home health/hospice, drug company, government, shelter, charity, compounding, and consultant settings. About three-fourths (71%) of the respondents worked in an urban area, the rest worked in a rural area. The majority of respondents (54%) worked by themselves or with one other person.

Perceived Time Available for Preceptor Development Training

The majority of survey respondents (56%) felt that preceptor training was important or very important but indicated that they have little time to devote to training. In particular, 42% of preceptors reported

allocating 10% or less of their time on average each month to training initiatives. The number of preceptors that attended the annual preceptor conference (live training) on at least one occasion was evenly divided with 47% previously attending the conference and close to 53% having not attended a conference. Of the 72 preceptors who had attended a conference, 59 had done so within the last 2 years.

On-line vs. Live Preceptor Development Training Preferences and Participation

Forty-nine percent of preceptors had previously completed a training course electronically. The media most used for these courses was the internet or online training. Fifty-seven percent indicated that they prefer to receive online training rather than a face-to-face (live) format.

A comparison of attendance at the annual preceptor conference to preference for electronic training and previous completion of some type of electronic training is presented in Table 2. Thirty-three percent of respondents who did not attend the annual conference preferred electronic training to live training. Fifteen percent who did not attend the conference did not prefer electronic training to live training. Of participants who did attend the annual conference, about 25% preferred electronic training and about 20% did not prefer electronic training. When comparing attendance at the conference to completion of electronic training before, about 28% who attended the conference had also completed electronic training before. Seventeen percent had attended the conference but had not completed any electronic training. Of those who had not attended the preceptor conference, over 20% had completed electronic training before and about 31% had not completed electronic training before.

Table 2: Comparison of Conference Attendance to Preference for Electronic Training and Completion of Electronic Training		Attended Preceptor Conference	
		Yes	No
Preferred Electronic Training*	Yes	24.5% (37)	33.1% (50)
	No	19.9% (30)	15.2% (23)
Had completed electronic training before**	Yes	28.3% (43)	20.4% (31)
	No	17.1% (26)	30.9% (47)

*There were 5 individuals who did not respond to either question and 1 that had to be thrown out
** There were 11 individuals who did not respond to either question and 2 that had to be thrown out

Preferences for Completing On-line Training After Viewing On-line Video

Fifty-two percent (n=79) of respondents watched the online training video created by the OU College of Pharmacy. Of the respondents who did not watch the video, 48% cited having too little time and 25% cited problems accessing the video or technical issues for not watching the training video. One participant indicated that he/she just did not prefer training online. A comparison of age to preference

for electronic training or face-to-face training is presented in Table 3. This table shows that the majority of responders in all age groups preferred electronic training to face-to-face training except those ages 61-65.

Table 3: Electronic Training to Live (Face-to-face) Training Preferences

Age Category	Prefer electronic training (n=87)	Do not prefer electronic training (n=54)	No Response (n=12)
25-30 years	69% (9)	31% (4)	0% (0)
31-35 years	56% (18)	34% (11)	9% (3)
36-40 years	61% (11)	39% (7)	0% (0)
41-45 years	57% (12)	24% (5)	19% (4)
46-50 years	61% (11)	39% (7)	0% (0)
51-55 years	55% (11)	35% (7)	10% (2)*
56-60 years	57% (13)	39% (9)	4% (1)
61-65 years	25% (2)	50% (4)	25% (2)

*one response in the 51-55 year range had to be thrown out because they marked both answers so it was included in the no response percentage and total

A comparison of age to participant responses regarding the likelihood that they would watch an online training video is presented in Table 4. Table 4 shows that again all age groups were likely to very likely to watch an online training video in the future. There were no significant differences found between groups. Also, as table 4 reveals, the likelihood of participants to watch the online training video format (55.7%) is closely comparable to the actual results of the number of respondents who watched the online training video (51.6%) created by the OU College of Pharmacy shown in Table 5. Table 5 summarizes the training format preferences of the preceptors. As noted, thirty-one percent of respondents highly preferred to receive training on CD-ROM.

Table 4: Likelihood of Watching an Online Training Video in the Future

Age Category	Unlikely-rating of 4 or less on Likert (28.8%,n=44)	Likely-rating of 5 or greater on Likert (55.7%, n=85)	No Response (15.7%, n=24)
25-30 years	31% (4)	54% (7)	15% (2)
31-35 years	34% (11)	50% (16)	16% (5)
36-40 years	33% (6)	56% (10)	11% (2)
41-45 years	24% (5)	57% (12)	19% (4)
46-50 years	17% (3)	61% (11)	22% (4)
51-55 years	35% (7)	50% (10)	15% (3)
56-60 years	22% (5)	65% (15)	13% (3)
61-65 years	38% (3)	50% (4)	12% (1)

NOTE: A Likert scale of 1-7 was used with 1 = *not likely* and 7 = *very likely*

Available Technology Resources

As shown, almost all preceptors surveyed (98%) had computer access. The majority of respondents (94%) reported using a personal computer (PC) instead of apple computer (Mac). A summary of hardware and software components available to preceptors are listed in Figures 1 & 2. Almost 90% of respondents have a CD-ROM drive with only

about 45% having a DVD drive. For video software, the highest percentage of respondents have Windows Media player versus Real Player or Quicktime player. Almost 90% of respondents have Internet Explorer for their browser with a small percentage having Netscape Navigator. Eighty percent had Microsoft Office and almost 90% had Adobe Acrobat Reader. Types of internet access available to respondents are shown in Figure 3. Only about seven percent of respondents had dial up internet connections, the rest had cable modem or higher.

Table 5: Preferred Training Format

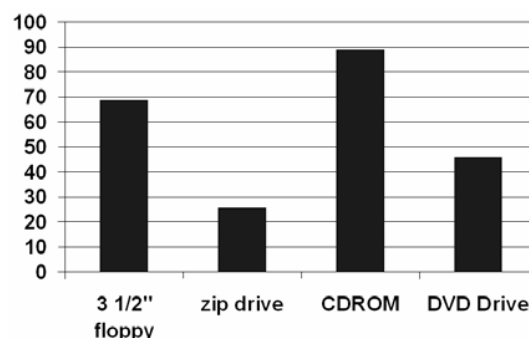| Preferred Training Format	Low	Moderate	High
CDROM format	24.8% (38)	41.1% (63)	31.4% (48)
Online Video format	24.9% (38)	47.1% (72)	24.8% (38)
Written Manual	57.6% (88)	35.3% (54)	4.6% (7)
DVD format	28.1% (43)	41.2% (63)	27.4% (42)
3 ½" Floppy format	59.5% (91)	30.8% (47)	5.9% (9)
Likelihood to Watch Online Training Video	16.3% (25)	26.8% (41)	41.2% (63)

Figure 1. Hardware components available to respondents (% of participants)
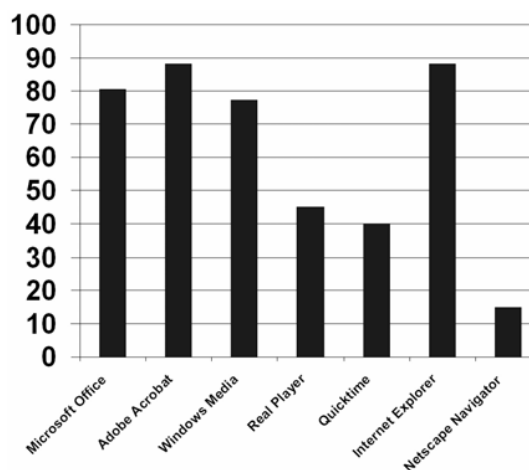

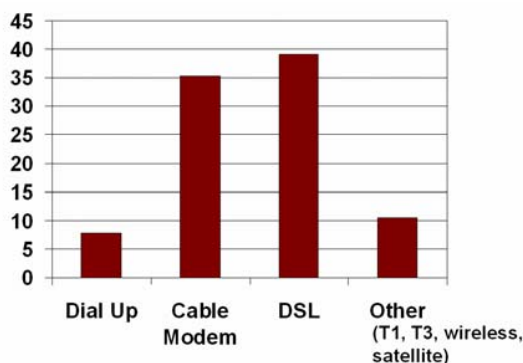Figure 2. Software components available to respondents (% of participants)

Figure 3. Type of internet access available to respondents (% of participants)

DISCUSSION

This pilot study yielded 3 outcomes. First, the results revealed that the majority of participants reported preceptor development training as an important or very important activity but the majority indicated that they have very little time to devote to training each month. These findings are similar to the findings of the Preceptor Development Task Force.[3] This finding reveals that when training programs are developed they should be brief to accommodate preceptor's time constraints because even with a short 18 minute supplemental video, 48% of the participants did not view it. In the future, focus groups with preceptors should be conducted to evaluate optimal training session time lengths as well as specific options to accommodate their time limitations.

The second finding was that over half of our preceptors prefer electronic training to face-to-face methods. In addition, 49% of the preceptors had participated in prior electronic training. Approximately one-third of our preceptors who did not attend the annual conference preferred electronic training and about 20% had completed electronic training. This finding suggests that preceptor training could be delivered to at least one-third more preceptors by offering training electronically. Alternatively, about 20% of preceptors who did attend the training did not prefer electronic training so we would still have about 20% of those who responded that prefer the face-to-face. About 25% of participants who attended the conference preferred electronic training and around 28% had completed some type of electronic training before indicating that preceptors are open to additional electronic methods and even participating in a variety of training methods both face-to-face and electronically. The majority of participants who viewed the on-line video developed internally reported preferences for participating in on-line preceptor training again in the future. Overall these results suggest that developing flexible training programs that could be delivered live and/or electronically may increase the number of participants in preceptor development programs. One remaining area of concern is that about 15% did not attend the live preceptor conference and do not prefer electronic training indicating that future

discussions with this population need to be conducted to determine their training preferences.

Because research related to generational differences seems to imply a difference between older and younger individuals related to technology and use of technology, we decided to explore this issue in our data. However, age did not seem to make a difference in format choice. In fact, older adults (up to age 60) seemed to embrace the new electronic format as much as the younger adults. The age group who had the highest preference for electronic format was age 25-30 (69%) which is comparable to research indicating that the younger generation prefers and even demands technology.[10,11] The one surprise we did find was that the group with the highest likelihood of watching the online video was the 56-60 year age group. However, research shows that older adults are more likely than younger to access the internet for work-related research which could provide support for this finding.[11] Additional generational research in these areas would be interesting.

The third finding is that almost all of the participants have the tools needed to receive training electronically. It is possible that a high percentage of preceptors possessing the necessary electronic tools could be generalized to all of the preceptors in our state, further supporting the benefit of electronic preceptor development training programs. In viewing the results of the software components, it is evident that online training should be developed that communicates and displays well in a Windows environment since the majority of respondents indicated having a PC, Windows Media player for video playback, and Internet Explorer for web browsing. We also found that problems with slower connection due to dial up access appear to be minimal meaning training materials can be developed for a higher rate of speed. The majority of participants were interested and capable of receiving training via CD-ROM or an online format. A study of the same effects in a CD-ROM format would be warranted since preceptors have the resources to view training in a CD-ROM format, prefer that format, and would have less technical issues related to that format.

Research should be conducted on a broader scale to capture preceptor training preferences at other Colleges of Pharmacy. It is important to continue to compare types of training and preceptor needs related to training because technology is changing daily and the quality of our sites depends on it. For example, CD-ROM versus an online format needs to be studied.

 In the future, a pre-test and post-test should be created to assess actual knowledge retention resulting from the different training formats and the effects of training formats on preceptor knowledge, attitude and skill development. Another issue for future research would be the effects of the training on pharmacy student learning.

Limitations

The overall response rate for this study was lower than desired even though it was comparable to the

response rate of similar studies. This could have been affected by the fact that although the experiential education department makes every effort to keep updated records on addresses some may have been incorrect. Also, many were work addresses where any number of individuals could have gotten the piece of mail and either discarded it or put it in a place where the preceptor may not have found it. We may have had a better opportunity of additional contact with preceptors via email, if email addresses for preceptors had been available. A second study employing additional mechanisms (such as email) to improve response rate would be desirable.

The response rate may represent a biased sample if primarily the most available and technologically literate preceptors responded. The two hundred plus preceptors who did not respond may not have technology or a desire to receive electronic training. In addition, the data was confined to our pharmacy school which may not be representative of the diversity possible with a larger group of preceptors from a variety of pharmacy schools.

We do acknowledge that the items included in the video were supplemental and limited to the specific needs of our preceptors. They do not represent the national training needs of pharmacy preceptors everywhere. A video or other electronic format should be developed to address the national preceptor development topics outlined, for example, by the Preceptor Development Committee. This committee recently (July 2007) released results of a survey that identified eight key topics for preceptor development.[13] These topics included: setting expectations, student orientation/professionalism, motivation, teaching effectiveness, communication and professional interactions, handling difficult situations, cultural diversity, evaluation / assessment / feedback. Our survey was already complete before this list was publicized.

CONCLUSIONS

The time preceptors have available competes with the need for preceptor development training regardless of training program format. This study successfully captured baseline data about preceptor's preferences for and access to electronic preceptor development. Overall, the majority of preceptors prefer electronic preceptor development training programs regardless of age, would participate in future electronic training after having participated in electronic training and have the available resources to participate in electronic training. Future preceptor development programs should have a flexible format to accommodate preferences for live and electronic programming. Future studies should explore the impact of training format on participation, knowledge and skill retention as well as student learning outcomes.

CONFLICT OF INTEREST

None declared.

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