Survey of Basic Life Support Training in U.S. Schools and Colleges of Pharmacy

Kenneth L. McCall and Robert Supernaw
School of Pharmacy, Texas Tech University, 1300 Coulter Drive, Amarillo TX 79106

A self-administered questionnaire exploring the integration of basic life support (BLS) training in pharmacy curricula was disseminated to the chairperson of the department of pharmacy practice of each school and college of pharmacy in the United States as listed in the 2000-2001 American Association of Colleges of Pharmacy roster. The questionnaire was administered via electronic mail by the Coursemetric™ survey tool. The survey was approved by a local investigational review board, and consent was implied when a respondent completed the questionnaire. Forty-three surveys were completed for a 52 percent response rate. Forty (93 percent) of the respondents represent schools that require pharmacy students to obtain BLS training, whereas only 16 (37 percent) schools have incorporated BLS instruction into a course for academic credit within the Doctor of Pharmacy curriculum. While BLS training is commonly required among U.S. schools and colleges of pharmacy, this training is often extracurricular.

INTRODUCTION
Basic life support (BLS) training has been recommended for all health care professionals since 1966(1). Hundreds of thousands of healthcare professionals have learned BLS in American Heart Association courses over the past three decades(2). The incorporation of BLS instruction in the Creighton University School of Pharmacy curriculum was described as early as 1976, yet to our knowledge the extent of BLS instruction across pharmacy curricula in the United States has not been reported(3). The goal of the present study was to investigate and describe the integration of BLS training in pharmacy curricula among U.S. schools and colleges of pharmacy.

METHODS
A 12 question self-administered survey (see Appendix) was disseminated in November of 2001 to the chairperson of the department of pharmacy practice of each U.S. school and college of pharmacy as listed in the 2000-2001 AACP roster. The questionnaire was administered via the Coursemetric™ survey tool. The Coursemetric™ program sent a reminder to all non-responders two and four weeks after the original survey date. The survey was approved by a local investigational review board, and consent was implied when a respondent completed the questionnaire.

RESULTS
Forty-three of 82 surveys were completed for a 52 percent response rate. Of the respondents, 40 (93 percent) represent schools that require students to learn BLS, and 39 (91 percent) require students to additionally obtain BLS certification. Among the institutions that require BLS instruction, 26 (65 percent) require a healthcare provider course, 10 (25 percent) require a layperson course, and four (10 percent) require an unspecified course. Of the pharmacy schools that require BLS certification, 15 (38 percent) and 12 (31 percent) utilize the American Heart Association and American Red Cross, respectively.

Basic life support instruction was reported to be required prior to entry into the PharmD curriculum by six (14 percent) institutions; prior to the beginning of the third-to-last year (2nd professional year of a 2-4 PharmD program) of the PharmD curriculum by 11 (26 percent); prior to the beginning of the second-to-last year (3rd professional year of a 2-4 PharmD program) by seven (16 percent); and prior to the beginning of the last year (4th profession year of a 2-4 PharmD program) by 16 (37 percent).

Sixteen (37 percent) survey respondents indicated that BLS in taught within a course for academic credit in the PharmD curriculum; the most common course cited was patient/physical assessment while others included therapeutics and experiential courses. Twenty-two (51 percent) indicated that BLS instruction is a prerequisite for a course in the PharmD curriculum and of these respondents, 21 (95 percent) specifically indicated that pharmacy practice experiences require BLS instruction as a prerequisite. One of these twenty-two responders (5 percent) indicated that physical assessment requires BLS instruction as a prerequisite. BLS is taught by a college of pharmacy faculty member according to five (12 percent) survey responders while 35 (81 percent) responders stated that BLS is taught by an outside instructor.

DISCUSSION
Pharmacists' attitudes toward BLS training received in pharmacy school were explored in a self-administered questionnaire among 1981 and 1982 University of Wisconsin School of Pharmacy graduates(4). This survey revealed that 134 (72 percent of respondents) believed that the BLS program should continue to be mandatory for graduation, and 131 (70 percent) believed their training to be of value in their current practice.

American Journal of Pharmaceutical Education Vol. 66, Fall 2002 271
Additionally, nine (five percent) of the pharmacists had performed BLS on a victim since their graduation.

The extent of pharmacist involvement in CPR teams among U.S. hospitals with 50 or more licensed beds was investigated in a 1998 survey mailed to hospital pharmacy directors(5). Pharmacists' participation on CPR teams varied significantly by hospital teaching affiliation, pharmacy director's education, pharmacists' location in the hospital, and the regional location of the hospital. Overall, 302 of 950 hospitals reported pharmacists' involvement on CPR teams in 1998 and this degree of participation remained constant compared to similar 1989, 1992, and 1995 surveys(6-8).

Although pharmacy practices vary greatly, it is probable that a pharmacist may encounter a victim in cardiopulmonary arrest in almost every pharmacy setting. The pharmacist may be a lone rescuer or a member of a CPR team. Regardless, the pharmacist should be adequately trained with the knowledge and skills of BLS in order to save a victim's life.

CONCLUSION
This survey revealed that BLS instruction is a common requirement of students enrolled at U.S. schools and colleges of pharmacy. Most often, the BLS course is extracurricular and taught by an outside instructor according to survey responders. The majority of respondents indicated that clerkship courses require BLS instruction as a prerequisite and a small minority indicated that BLS is taught within a patient/physical assessment course for academic credit.

Acknowledgment. The authors thank Linda Goldstein for her assistance with the Coursemetric survey.

References

APPENDIX. BASIC LIFE SUPPORT QUESTIONNAIRE

1. Are students at your College of Pharmacy required to learn Basic Life Support (BLS) or Cardiopulmonary Resuscitation (CPR)?
2. If BLS/CPR instruction is required at your College of Pharmacy, are the students also required to obtain certification?
3. Which of the following agencies provides BLS/CPR certification for your students?
   - American Heart Association
   - American Red Cross
   - Other
   - Not applicable
4. When is BLS/CPR instruction required in your PharmD curriculum?
   - Prior to entry into the PharmD program
   - Prior to the beginning of the third-to-last year of the PharmD program
   - Prior to the beginning of the second-to-last year of the PharmD program
   - Prior to the beginning of the last year of the PharmD program
   - Not applicable
5. What type of BLS/CPR instruction is required?
   - Healthcare provider BLS instruction
   - Heartsaver BLS instruction
   - Other
   - Not applicable
6. Is BLS/CPR instruction taught within a course for academic credit within the PharmD curriculum?
7. If BLS/CPR instruction is integrated into a course for academic credit, what is the course title?
8. Is BLS/CPR instruction a prerequisite for any courses within the PharmD curriculum?
9. If BLS/CPR instruction is a prerequisite for a course, which course(s)?
10. Is BLS/CPR taught by a faculty member of the College of Pharmacy or by an outside instructor?
11. Are students charged a separate fee for BLS/CPR instruction?
12. If a fee is charged for BLS/CPR instruction, what is the fee?