

*Original Research Article*

# Critical Care Nurses' Perceptions about the Continuing Nursing Education at Saudi Hospitals: Educational Needs and Universities' Role

Dr. Mahmoud Abdul Hameed Shahin

Abstract

Assistant Professor at Al-Ghad International Colleges for Applied Medical Sciences, KSA.

Email: [Mahmood81us@yahoo.com](mailto:Mahmood81us@yahoo.com),  
[Mshahin@gc.edu.sa](mailto:Mshahin@gc.edu.sa)  
Mob: +966507453387

Continuing nursing education can help nurses to stay current on the latest best practices and also become more knowledgeable about a particular area of interest; furthermore, the completion of continuing nursing education initiatives is often a requirement to maintain certifications or licenses that serve to demonstrate nurses' qualifications to employers, patients, and families. This study aimed to identify the preferences of nurses regarding continuing nursing education, educational requirements, and their perceptions about the role of universities in the delivery of continuing nursing education programs to hospital staff. The study employed a cross-sectional descriptive exploratory design utilizing a convenience sample of 100 nurses working in the critical care departments of two hospitals in Al-Qassim, KSA (government and private). A structured questionnaire, which was constructed by the researcher, was distributed to nurses over one month. The collected data were analyzed and tabulated using the Statistical Package for the Social Sciences software program (IBM Corp., Armonk, NY, USA). All ethical principles of scientific research were considered. As per nurses' opinions in the results, the benefits of continuing nursing education include improving knowledge and skills, critical thinking, and decision-making as well as promoting professional growth. Nurses' preferable ways of getting continuing education were attending conferences or live classroom lectures, online, and through journals, respectively. They preferred participating in a monthly-based schedule, i.e., one day a week for less than three hours. Nurses have a positive belief that universities should hold more responsibility for promoting continuing education at hospitals. Creating partnerships between hospitals and the nursing faculties or colleges of the local community is highly recommended. Continuing nursing education programs must be built upon the survey of nurses' opinions about the most important or requested topics from the nurses' points of view.

**Keywords:** Critical care, Continuing nursing education, Universities' role.

## INTRODUCTION

For a nurse to become a professional medical practitioner, he/she requires a strong educational foundation. Most nurses earn a bachelor degree and

pass the required certification exams, like the Saudi Commission for Health Specialties Exam, before even seeing their first patient. They spend a long time studying

and preparing themselves to get the certificate in order to pass the board examination. They study various references and read complex educational resources to be able to acquire the necessary knowledge and master the important skills required by the staff nurses in the hospitals. However, once nurses are put on their scrubs and enter the working world, they usually stop reading and studying and focus only on the practical competencies of the nursing profession.

Focusing on the clinical skills and competencies and ignoring updates to the literature designed to improve the theoretical understanding of practitioner nurses could result in having obsolete information and distorted knowledge about nursing, and may lead to malpractice and patient harm (Garafalo, 2016). Improving the information of practitioner nurses in the hospitals is therefore crucial to update their knowledge and improve their clinical competencies utilizing updated protocols, evidence-based practice, and the most recent literature, especially in the critical care units.

As nursing science is continually updated and is supplied with new literature, nurses, from all categories, must update their comprehension about nursing through looking at the most recent textbooks, electronic references, and the new research studies and articles available (Shinners, 2019). Nurses have a high workload in the clinical settings and there is no real motivation for them to develop their nursing information in most hospitals around the world, nor is there a clear way to encourage and support nurses to improve their level of knowledge, especially with intense work pressure and multitasking, which may lead to them building their practice based on old nursing science rather than up-to-date references.

The term “continuing education” is often used to broadly describe education programs designed for adult learners who are looking for personal or professional enrichment (Wellings, Gendek, & Gallagher, 2017). People may use the phrase continuing education to refer to specialized degree programs, but for professionals in health care, the term often relates to the specific education courses that are required for maintaining certification requirements. Continuing nursing education is courses designed specifically for nursing professionals. The field of nursing is constantly evolving, with new technology, treatment options, and protocols (Armstrong, 2019).

Continuing education is defined by the American Nurses Association (ANA) as being composed of “systematic professional learning experiences designed to augment the knowledge, skills, and attributes of nurses and therefore enrich the nurses’ contributions to quality health care and their pursuit of professional career goals”(Association, 2010). Similarly, the American Nurses Credentialing Center defined continuing nursing education activities as “those learning activities intended

to build upon the educational and experiential bases of the professional registered nurses for the enhancement of practice, education, administration, research, or theory development to the end of improving the health of the public” (Spring, 2011).

Nurse continuing education courses can help nurses to stay current on the latest best practices and become more knowledgeable about a particular area of interest. In addition, continuing nursing education for nurses is often a requirement to maintain certifications or licenses that demonstrate their qualifications to employers, patients, and families, so it’s important to stay on top of nursing continuing education (Dickerson & Bernard, 2018). Furthermore, most countries require nurses to complete some form of continuing education every two to three years as a condition of recertification. Specialty certifications such as medical–surgical, critical care, and neonatal have specific requirements for continuing education.

One of the main purposes of pursuing continuing nursing education after graduation and during clinical practice is to assist each nurse with improving their performance in present position and in acquiring personal and professional abilities that maximize the possibility of career advancement (Dunn, 2015). This can be achieved via providing planned activities directed towards meeting the learning needs of the nurse following basic nursing education.

The necessity of continuing nursing education is well-established. First, the Code of Ethics for Nurses with Interpretive Statements (ANA, 2001) contains a provision that the nurse has the responsibility to maintain competence and continue personal and professional growth. Professional growth in knowledge development and skill acquisition requires a commitment to lifelong learning, which includes continuing education as well as advanced academic education, certification, and activities that support competent professional practice.

The scope and standards of nursing practice are based on the premise that “nursing professional development is a vital phase of lifelong learning in which nurses engage to develop and maintain competence, enhance professional nursing practice, and support the achievement of career goals” (Spring, 2010). The model of nursing professional development puts forth in the standards includes components of orientation, in-service education, competency programs, academic partnerships, research, and career development and role transition as well as continuing nursing education.

Furthermore, adult learning principles support the need for learning that goes beyond just the initial preparations for practice (Senge, 1990, 2006). Thorough needs assessments provide a foundation for building learning activities that are relevant to learners, are constructed based on previous learning, and which relate to real-world application. Learners are self-motivated and

learn best when they are actively engaged in the learning process. Continuing education enables learners to keep up with contemporary changes and supports the transfer of knowledge from setting to setting (Senge, 1990, 2006).

In Saudi Arabia, the first formal training program for nurses was established at a health institute in Riyadh in 1958, but it was for the training of male nurses only (Tumulty, 2001). This training program was a result of a collaborative effort between the Saudi Arabian Ministry of Health (MOH) and the World Health Organization (WHO). In the inaugural, one-year nursing program, only 15 Saudi male students were enrolled.

The College of Nursing at the King Saud University in Riyadh subsequently established the first Bachelor of Science in Nursing (BSN) program in 1976. Then, in 1987, it introduced a Master of Science in Nursing. Today there are more than 15 schools offering BSN programs in Saudi Arabia for both males and females (kfshrc, 2011).

Nursing professional development builds on the basic academic education and clinical experience of nurses throughout their professional careers to support the ultimate goal of ensuring the quality of the health care given to the public. Although professional nurses remain ultimately responsible for their ongoing improvement and professional development, the hospitals are co-responsible for providing continuing nursing education within the institution to assure quality nursing service. Through these activities, nurses can earn continuing education contact hours (formerly known as continuing education units or CEUs) (ANA, 2016).

The importance of continuing education in any profession is paramount. Within the nursing profession in Saudi Arabia, continuing education is a mandatory requirement by the Saudi Commission for Health Specialties for all nurses in the clinical setting. In general, to maintain licensing, nurses must accrue a specific number of continuing medical education credits every two years (kfshrc, 2011).

Knowledge and skills continue to dynamically change and expand in the nursing profession. Therefore, continuous learning and development are essential to ensure quality health care while corresponding to the latest trends and cutting-edge technologies. The use of continuing nursing education is a sound approach to achieve such a development.

Continuing nursing education is an essential feature of the practice of modern nursing, as it maintains and supports the nurse's ability to provide quality patient care. This concept of "lifelong learning" must be actively developed in undergraduate nursing students and sustained in the graduate nurses, including both practitioners and teachers (Rouleau et al., 2017).

The role of the universities in the delivery of continuing nursing education to the nursing staff of Saudi hospitals is still unclear and even not significant. Still, universities can help to provide continuing nursing education in an

organized and appropriate way by utilizing highly qualified personnel, suitable venues, advanced technology, and recent nursing literature and references. Universities are considered as research and educational centers in the communities; therefore, they should have a significant role in providing continuing education for hospital staff to enrich their knowledge and understanding of the novel, best evidence-based nursing practices, so as to ensure increased safety and quality of care (Lalonde et al., 2013).

The educational requirements of nurses working in Saudi government and private hospitals are not well-investigated to date; moreover, the preferences of nurses in the provision of continuing educational programs are unclear. As such, the aim of this study was to identify nurses' perceptions and opinions about their preferred manner(s) of receiving continuing education and to explore their educational requirements in the hospitals of Saudi Arabia. Besides, this study also aimed to identify nurses' perceptions about the role of universities in the continuing nursing education delivery to hospital staff.

## MATERIALS AND METHODS

### Research Design

A cross-sectional descriptive exploratory design was utilized.

### Sample

Convenience sampling was used, where all accessible nurses working in the critical care departments of two hospitals in Al-Qassim region were included in the study (n = 100).

### Setting

This study was conducted involving all critical care departments of two hospitals, one governmental (Prince Sultan Cardiac Center) and one private (Qassim National Hospital) in Al-Qassim region, KSA.

### Tools of Data Collection

Data collection was carried out using a structured questionnaire. The questionnaire was created by the researcher to compile questions about the educational needs, preferences, and opinions about the universities' role in continuing nursing education among nurse practitioners. The constructed tool was derived from the literature, furthermore; content validity and test-retest

reliability were evaluated. The tool was piloted on 10 nurses to test the tool's clarity and efficiency, and these 10 cases were excluded from the final results.

This questionnaire was designed to gather data about the sociodemographics of participants, their opinions about the preference of continuing nursing educational programs, their perceptions about the role of universities in the provision of continuing nursing education, and their educational requirements and needs in the clinical settings.

### Procedure

The questionnaire was distributed to all nurses working in the critical care units of the two aforementioned hospitals over one month (September 2018). All nurses who were willing to participate in the study were included, including both diploma and bachelor's degree holders. Nurses filled out the questionnaire, considering their educational requirements in hospitals and their views about the role of universities in providing continuing nursing education in Saudi hospitals. The completed questionnaires were submitted to the head of department after being filled out and were then collected by the researcher to be analyzed.

### Statistical Design

Collected data were tabulated, scored, and analyzed. Descriptive and correlational tests were carried out. The collected data were analyzed using the Statistical Package for the Social Sciences software program (IBM Corp., Armonk, NY, USA). Data are presented in both descriptive forms (means, standard deviations, t-test, etc.) as well as correlation tests ( $p$ -value  $\leq 0.05$ ) ("The Statistical Package for Social Sciences (SPSS) Statistics," V22.0).

### Ethical Considerations

Official permission was obtained from the administration and nursing management of the included hospitals; additionally, a written informed consent was obtained from each nurse prior to them completing their questionnaire. The purpose of the study and the procedure were explained to the participants; moreover, they were assured that participation in the study was voluntary. No harm was expected to come to either patients or nurses due to participation in the study and all information was kept confidential. The study proposal was submitted to the institutional review boards of the included hospitals to secure ethical approval. The results

of the study were also submitted to the hospitals upon their request.

### RESULTS

For the sociodemographic data of the participating nurses, the results reflected that the mean age of the participating nurses was 30.56 years, with a higher mean age for the nurses of the government hospital in comparison with the nurses of the private one (32.5 and 26.44 years, respectively). The mean number of years of experience of the nurses was 5.64 years, with a significantly higher mean years of experience noted among the nurses of the government hospital versus the private one (8.06 and 4.69 years, respectively). Regarding the average completed continuing education hours during the last year, the results indicated a significantly higher average for nurses in the government hospital as compared with for nurses in the private hospital (29.97 and 14.31 hours, respectively), with an average of 24.96 hours noted for all participants in the last year (Table 1).

As presented in Table 2, the majority of participating nurses were non-Saudi female nurses. Almost half of them were married. Most participants were working as staff nurses (92%), with almost two-third of them being critical care nurses at the government hospital (68%) and one-third being at the private one (32%). Most of the nurses were bachelor's degree holders (80%), and 42% of them were working at the intensive care units, while the rest were distributed among other critical care units; for example, cardiac operation room, cardiology ward, non-invasive unit, coronary care unit, and cardiac surgical intensive care unit. Almost three-fourths of the nurses had attended a prior specialized comprehensive educational program focused in nursing as a part of continuing nursing education in the hospital.

Regarding the perceptions of nurses about the benefits of attending continuing educational programs, nearly all reported that improving their knowledge and skills was the most significant benefit of completing said educational programs (94%). In the same vein, improving critical thinking and decision-making constituted the second most important benefit of continuing education programs, followed by facilitating professional growth. It was noticed that unsuitability of time was the most prominent barrier to attending the continuing educational program (68%), followed by the cost of the educational program (60%) (Table 3).

As pointed in Table 4, nurses mentioned that the preferred way of getting continuing nursing education was through attending conferences (66%), followed by attending live classroom lectures; on the other hand, the least preferred way of accessing continuing education was by reading journals (14%). Separately, nurses

**Table 1.** Sociodemographic data

| <b>Sociodemographic data (n=100)</b>               | <b>Hospital</b>     | <b>Mean</b> | <b>Total Mean</b> | <b>SD</b> |
|----------------------------------------------------|---------------------|-------------|-------------------|-----------|
| Age                                                | Governmental (N=68) | 32.50       | 30.56             | 6.34      |
|                                                    | Private (N=32)      | 26.44       |                   |           |
| Years of experience                                | Governmental (N=68) | 8.06        | 6.98              | 5.64      |
|                                                    | Private (N=32)      | 4.69        |                   |           |
| Continuing education hours gained in the last year | Governmental (N=68) | 29.97       | 24.96             | 21.3      |
|                                                    | Private (N=32)      | 14.31       |                   |           |

**Table 2.** Sociodemographic data

| <b>Sociodemographic data (n=100)</b>                          | <b>N</b>                  | <b>%</b> |      |
|---------------------------------------------------------------|---------------------------|----------|------|
| Nationality                                                   | Saudi                     | 14       | 14.0 |
|                                                               | Non Saudi                 | 86       | 86.0 |
| Gender                                                        | Male                      | 12       | 12.0 |
|                                                               | Female                    | 88       | 88.0 |
| Marital status                                                | Single                    | 44       | 44.0 |
|                                                               | Married                   | 52       | 52.0 |
|                                                               | Widow                     | 4        | 4.0  |
| Job                                                           | Staff nurse               | 92       | 92.0 |
|                                                               | Charge nurse              | 2        | 2.0  |
|                                                               | Head nurse                | 4        | 4.0  |
|                                                               | Others                    | 2        | 2.0  |
| Hospital                                                      | Governmental              | 68       | 68.0 |
|                                                               | Private                   | 32       | 32.0 |
| Department                                                    | Cardiac Operation Room    | 12       | 12.0 |
|                                                               | Cardiology ward           | 10       | 10.0 |
|                                                               | Intensive care unit (ICU) | 42       | 42.0 |
|                                                               | Non Invasive Unit         | 12       | 12.0 |
|                                                               | Coronary Care Unit        | 12       | 12.0 |
| Educational level                                             | Cardiac Surgical ICU      | 12       | 12.0 |
|                                                               | Nursing Diploma           | 20       | 20.0 |
|                                                               | BSN                       | 80       | 80.0 |
| Attending previous specialized educational program in nursing | Yes                       | 74       | 74.0 |
|                                                               | No                        | 26       | 26.0 |

**Table 3.** Nurses' perceptions about the benefits and barriers of continuing educational programs

| <b>How would a continuing nursing education program benefit you?</b>        | <b>N</b> | <b>%</b> |
|-----------------------------------------------------------------------------|----------|----------|
| Improve your knowledge and skills                                           | 94       | 94.0     |
| Facilitate your professional growth                                         | 78       | 78.0     |
| Improve your critical thinking and decision making                          | 80       | 80.0     |
| Positively impact your personal growth                                      | 72       | 72.0     |
| Produce a better patient outcomes                                           | 72       | 72.0     |
| <b>What are the barriers to you attending continuing nursing education?</b> | <b>N</b> | <b>%</b> |
| Program cost                                                                | 60       | 60.0     |
| Transportation                                                              | 18       | 18.0     |
| Availability                                                                | 38       | 38.0     |
| Lack of interested                                                          | 2        | 2.0      |
| Unsuitable time                                                             | 68       | 68.0     |
| Courses do not meet my needs                                                | 6        | 6.0      |

**Table 4.** Nurses' perceptions about the preferred continuing education program

| <b>How do you prefer getting your continuing nursing education?</b> | <b>N</b> | <b>%</b> |
|---------------------------------------------------------------------|----------|----------|
| Classrooms, live                                                    | 54       | 54.0     |
| Journal                                                             | 14       | 14.0     |
| Attending conferences                                               | 66       | 66.0     |
| Online/ Webinar                                                     | 38       | 38.0     |
| <b>How do you obtain most of your continuing nursing education?</b> | <b>N</b> | <b>%</b> |
| Employer, education department                                      | 62       | 62.0     |
| Journals                                                            | 16       | 16.0     |
| Internet                                                            | 60       | 60.0     |
| Books                                                               | 22       | 22.0     |

**Table 5.** Nurses' perceptions about the schedule of continuing educational programs

| <b>What is the preferred schedule of the continuing educational program?</b>                                    | <b>N</b> | <b>%</b> |
|-----------------------------------------------------------------------------------------------------------------|----------|----------|
| All days program (5 or more hours a week)                                                                       | 18       | 18.0     |
| Three days a week program (three hours a week)                                                                  | 20       | 20.0     |
| One day a week program (less than 3 hours)                                                                      | 62       | 62.0     |
| <b>In your opinion, what is the preferred length of your continuing education plan offered by the hospital?</b> | <b>N</b> | <b>%</b> |
| Weekly                                                                                                          | 34       | 34.0     |
| Monthly                                                                                                         | 44       | 44.0     |
| For 6 months                                                                                                    | 12       | 12.0     |
| Yearly                                                                                                          | 10       | 10.0     |

expressed that they obtained most of their continuing education through the education department of their hospital (62%). Moreover, the second resource used by nurses to get their continuing education was the Internet (60%), while the third resource was the books, and the last source for such was reading journals (16%).

As presented in Table 5, most of the participants revealed that their preferred schedule of continuing education courses is one day a week for less than three hours (62%); however, the preferred plan for continuing education programming offered by the hospital, as reported by nurses, was a monthly-based schedule (44%).

Using a Likert scale to assess nurses' perceptions about the role of universities in the provision of continuing nursing education, nurses generally believe that universities should hold more responsibility in this regard (Table 6). Most of the staff believes that faculty members improve their skills and gain clinical updates when participating in continuing education at hospitals (mean = 3.86/5). They also consider that there should be a partnership between the nursing management of the hospitals and the deanships of nursing faculties and that involving nursing colleges in continuing nursing education programs will have a great and beneficial impact on the proper understanding, application, and utilization of evidence-based practices (mean = 3.84/5).

Utilizing a paired sample t-test to compare means, it was found that the nurses' perceptions that "universities of the local community should have a role in the provision and the development of continuing nursing education programs at hospitals" was significantly higher among private hospital nurses ( $p = 0.001$ ).

Moreover, the perception that "continuing nursing education at hospitals requires specialized tutors and nursing professors from the universities" was also significantly greater among private hospital nurses. Conversely, however, the perception that "the education department at the hospital is enough to provide the continuing education program to the nursing staff and should work independently" was significantly stronger among government hospital staff. Lastly, the perception that "faculty members improve their skills and gain clinical updates when they participate in continuing education at hospitals" was significantly more prominent among private hospital staff (Table 7).

When they were asked about the clinical nursing educational topics that they most need, nurses declared that electrocardiogram interpretation comes first (70%), followed by pharmacological updates (66%) and cardiovascular disease (64%). On the other hand, the least requested clinical educational topic was urinary tract diseases, followed by abuse and neglect and then wound dressing (16%, 20%, and 22%, respectively) (Table 8).

**Table 6.** Nurses' perceptions about the role of the universities in providing continuing nursing education programs at hospitals

| Items                                                                                                                                                                                   | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree | Mean | SD    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------|---------|-------|----------------|------|-------|
| The universities of the local community should have a role in the provision and the development of continuing nursing education programs at hospitals.                                  | 0                 | 4        | 34      | 50    | 12             | 3.70 | 0.732 |
| Nurses at hospitals need support of the universities and nursing faculty members in getting updated continuing nursing education.                                                       | 0                 | 0        | 34      | 54    | 12             | 3.78 | 0.645 |
| Involving nursing colleges in the continuing nursing education programs will have a great impact on the proper understanding, application and utilization of evidence based practice.   | 0                 | 0        | 28      | 60    | 12             | 3.84 | 0.615 |
| Continuing nursing education at hospitals require specialized tutors and nursing professors from the universities.                                                                      | 0                 | 6        | 22      | 56    | 16             | 3.82 | 0.77  |
| There is a good cooperation between the education department at the hospitals and the nursing faculty members at universities in the provision and developing the educational programs. | 0                 | 4        | 35      | 52    | 9              | 3.65 | 0.696 |
| There should be a partnership between the nursing management of the hospitals and the deanships of nursing faculties and colleges.                                                      | 0                 | 0        | 28      | 60    | 12             | 3.84 | 0.615 |
| The education department at the hospital is enough to provide the continuing education program to the nursing staff, and should work independently.                                     | 0                 | 12       | 33      | 47    | 8              | 3.48 | 0.794 |
| Faculty members improve their skills and gain clinical updates when participate in continuing education at hospitals.                                                                   | 2                 | 0        | 20      | 66    | 12             | 3.86 | 0.697 |
| Nursing staff gain professional education and updated information when the faculty members of nursing colleges participate in the provision of the continuing education at hospitals.   | 0                 | 6        | 28      | 58    | 8              | 3.68 | 0.709 |
| I think continuing education at hospitals should be independent of the academic education.                                                                                              | 0                 | 4        | 46      | 41    | 9              | 3.53 | 0.706 |

**Table 7.** Comparing government and private hospital staff perceptions about the role of universities in hospitals' continuing education programs

| Items                                                                                                                                                                                   | Governmental |       | Private |       | Paired sample t-test |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------|---------|-------|----------------------|
|                                                                                                                                                                                         | Mean         | SD    | Mean    | SD    | Sig.                 |
| The universities of the local community should have a role in the provision and the development of continuing nursing education programs at hospitals.                                  | 3.53         | 0.610 | 4.06    | 0.84  | 0.001                |
| Nurses at hospitals need support of the universities and nursing faculty members in getting updated continuing nursing education.                                                       | 3.74         | 0.614 | 3.88    | 0.707 | 0.315                |
| Involving nursing colleges in the continuing nursing education programs will have a great impact on the proper understanding, application and utilization of evidence based practice.   | 3.76         | 0.601 | 4       | 0.622 | 0.074                |
| Continuing nursing education at hospitals require specialized tutors and nursing professors from the universities.                                                                      | 3.71         | 0.793 | 4.06    | 0.669 | 0.030                |
| There is a good cooperation between the education department at the hospitals and the nursing faculty members at universities in the provision and developing the educational programs. | 3.71         | 0.67  | 3.5     | 0.745 | 0.189                |
| There should be a partnership between the nursing management of the hospitals and the deanships of nursing faculties and colleges.                                                      | 3.85         | 0.605 | 3.81    | 0.644 | 0.761                |
| The education department at the hospital is enough to provide the continuing education program to the nursing staff, and should work independently.                                     | 3.62         | 0.701 | 3.19    | 0.896 | 0.010                |
| Faculty members improve their skills and gain clinical updates when participate in continuing education at hospitals.                                                                   | 3.76         | 0.694 | 4.06    | 0.669 | 0.046                |
| Nursing staff gain professional education and updated information when the faculty members of nursing colleges participate in the provision of the continuing education at hospitals.   | 3.68         | 0.722 | 3.69    | 0.693 | 0.943                |
| I think continuing education at hospitals should be independent of the academic education.                                                                                              | 3.62         | 0.692 | 3.33    | 0.711 | 0.066                |

**Table 8.** Clinical nursing educational topics desired by the nursing staff

| Course                        | N  | %     | Course                        | N  | %     |
|-------------------------------|----|-------|-------------------------------|----|-------|
| Abuse/ Neglect                | 20 | 20.00 | Pharmacological updates       | 66 | 66.00 |
| Diabetes management           | 42 | 42.00 | Caring for pediatric patients | 34 | 34.00 |
| Neurologic disease            | 50 | 50.00 | Immunization                  | 30 | 30.00 |
| Basic Life support-BLS        | 38 | 38.00 | Physical assessment           | 34 | 34.00 |
| Advanced Life Support-ACLS    | 58 | 58.00 | Chronic disease               | 26 | 26.00 |
| ECG interpretation            | 70 | 70.00 | Infectious diseases           | 32 | 32.00 |
| Asthma                        | 24 | 24.00 | Dressing                      | 22 | 22.00 |
| Nursing documentation         | 44 | 44.00 | Pain management               | 38 | 38.00 |
| Nutrition                     | 26 | 26.00 | Medication administration     | 32 | 32.00 |
| Caring for geriatric patients | 28 | 28.00 | Central lines care            | 38 | 38.00 |
| Gastrointestinal diseases     | 38 | 38.00 | Childhood obesity             | 26 | 26.00 |
| Oncology                      | 42 | 42.00 | Phlebotomy & Cannulation      | 42 | 42.00 |
| Cardiovascular disease        | 64 | 64.00 | Respiratory diseases          | 38 | 38.00 |
| Hypertension                  | 30 | 30.00 | Urinary tract diseases        | 16 | 16.00 |

**Table 9.** Professional development topics desired by the nursing staff

| Course                            | N  | %     | Course               | N  | %     |
|-----------------------------------|----|-------|----------------------|----|-------|
| Utilizing evidence based practice | 38 | 38.00 | Presentation skills  | 22 | 22.00 |
| Time management                   | 40 | 40.00 | Stress management    | 44 | 44.00 |
| Conflict resolution               | 36 | 36.00 | Team management      | 48 | 48.00 |
| Leadership and management skills  | 58 | 58.00 | Strategic planning   | 24 | 24.00 |
| Being an effective charge nurse   | 32 | 32.00 | Emergency management | 44 | 44.00 |
| Communication skills              | 52 | 52.00 | Patient education    | 36 | 36.00 |
| Nursing research                  | 38 | 38.00 |                      |    |       |

When asked about the professional development topics they need, nurses brought to light that leadership and management skills come first, followed by communication skills (58% and 52%, respectively) (Table 9). On the contrary, the least requested professional development topics by nurses were presentation skills and strategic planning (22% and 24%, respectively).

## DISCUSSION

The average age of the Nurses and the mean years of experience were higher in the government hospital than in the private one, which clearly reflects increased staff retention in the former due potentially either to greater job security or having less staff turnover. Moreover, nurses of the government hospital had received significantly more continuing education hours in the last year (i.e., almost double), which reflects a higher focus of the government hospital on the provision of continuing nursing education programs and on offering opportunities for nursing staff to attend and participate in various educational activities.

Most of the critical care nurses included in this study had attended a previous specialized comprehensive educational program in nursing as a part of continuing nursing education in the hospital. The high motivation and enthusiasm of nurses to attend continuing education programs in the hospital setting is well-supported by many studies from different countries (Armstrong, 2019; Dolphin, 1983; Dunn, 2015; Eslamian, Moeini, & Soleimani, 2015; Jho & Kang, 2016).

The majority of nurses reported that the benefits of attending continuing educational programs include improving knowledge and skills followed by improving critical thinking and decision-making abilities as well as promoting professional growth. These findings are congruent with the results of a previous study conducted in the United States in which nurses identified clinical knowledge improvement as the most important benefit of continuing nursing education followed by improving clinical competencies and promoting professional growth (Nalle, Wyatt, and Myers, 2010). Regarding the barriers of attending continuing nursing education, the findings

reflected that unsuitability of time was the most prominent barrier, followed by cost. In a similar study in the United States, the most important barrier for attending continuing nursing education was the cost of the programs, followed by time unsuitability and distance from the workplace (Nalle et al., 2010).

Nurses reported that attending conferences was the preferred way for them to get their continuing nursing education, followed by attending live classroom lectures. Similar findings were revealed by other studies (Esquibel, 2011; Nalle et al., 2010). Furthermore, participants of the present study clarified that they gain most of their continuing nursing education through their employer, followed by Internet surfing and then through books. In a study conducted about the continuing education needs of nurses in a voluntary continuing nursing education state, the surveyed nurses reported that they gain most of their continuing nursing education through their employer, followed by conferences, and then through journals or print offerings (Nalle et al., 2010). Most of the participants expressed that the preferred plan for continuing education offered by the hospital is on a monthly basis, which reflects why most hospitals around the world build their dynamic continuing education program plans month by month.

Regarding the role of universities, nurses generally believe that universities should take greater responsibility in the provision of continuing nursing education. However, this perception is significantly dominant among nurses in the private hospital, which is congruent with the lack of their exposure to sufficient and specialized nursing education programs and the need for the presence of a partner specialized in providing more educational programs with the need for courses diversification.

Regarding the clinical nursing educational topics most desired from among 28 topics, nurses indicated that electrocardiogram interpretation comes first, followed by pharmacological updates and then cardiovascular disease, which reflects the importance of those topics for critical care nurses and their impact on their daily clinical practice. Separately, regarding the professional development topics, courses in leadership and

management skills came first, followed by communication skills. This finding highlights the importance of these skills in clinical practice in intensive care units as well as the importance of problem-solving and improved communication among multidisciplinary team members.

## CONCLUSION

As continuing education is considered the main source for improving the knowledge and information of practicing nurses regarding medical updates after graduation, it is mandatory that nurses should gain annually a minimum amount of on-the-job training and continuing education. Nurses of the government hospital gained almost double the amount of continuing nursing education hours as did the nurses of the private sector. At the same time, nurses generally believed that universities and faculty staff should have more responsibility in the provision of continuing nursing education to nursing staff in the hospitals.

Improving the nursing knowledge and skills was the main benefit behind the endeavor of nurses to attend continuing nursing education courses as per their perceptions. Furthermore, improving critical thinking and decision-making abilities as well as facilitating professional growth were the next most important aims of attending those educational programs. Regarding obstacles, it was clear that unsuitability of time, followed by the cost of an educational program were the most prominent barriers working against nurses interested in attending continuing education programs in Saudi hospitals.

The preferred way of getting continuing nursing education was through attending conferences, then live classroom lectures. On the contrary, journals were the least usable and favorable way for gaining continuing nursing education. Nurses generally preferred the continuing education schedule to include a monthly-based program and for lectures or workshops to be one day a week for no more than three hours.

In relation to the clinical nursing educational topics, electrocardiogram interpretation followed by pharmacological updates and cardiovascular disease were the most important topics requested by the critical care nurses in the selected hospitals. However, leadership and management skills followed by communication skills were the most pressing professional development topics desired by the participants.

## RECOMMENDATIONS

Based on the results of the current study and since nursing service is highly vital and in some form composes

the vast majority of the services provided in hospitals, it is recommended that hospital administrations and nursing management staff pay more attention, particularly in private hospitals, to the provision of continuing education programs to nursing staff, especially in critical care units, in order to assure that nurses have updated information and can provide safe patient care. Creating partnerships between hospitals and the nursing faculties or colleges of the local community is highly recommended. This connection will help to activate the role of the faculty members in the provision of updated continuing educational courses to nurses in their clinical settings and will have a great impact on the improvement of the clinical nursing expertise of the academic team.

There should also be greater attention paid to the barriers preventing nurses from attending continuing education programs in an attempt to overcome those barriers and make nurse attendance more feasible. Making the time of the educational program more suitable for nursing staff, giving the staff days off during these courses, and adjusting the cost of the program to be affordable for the staff will effectively help to overcome the barriers, thus increasing nurses' attendance at continuing nursing education programs. In the same vein, giving more opportunities to nursing staff to attend conferences and live classroom lectures will significantly improve the continuing nursing education of the hospital staff. These recommendations are congruent with the opinions of the staff about the preferable ways of accessing continuing education courses.

Continuing nursing education programs should be built upon the survey of nurses' opinions about the most important or requested topics from the nurses' points of view. This protocol would help to make the educational programs more interesting and relevant to nursing staff, thus ensuring better attendance, covering their needs, and meeting their expectations. Nurses in critical care settings prefer coverage of clinical educational topics associated with the heart, like electrocardiogram interpretation, pharmacological updates, and cardiovascular disease coverage. Additionally, leadership and management skills and communication skills are considered of high importance to critical care nurses for their professional development in the clinical field.

## ACKNOWLEDGEMENT

The author is indebted to the administration and the health care providers at Al-Qassim National Hospital and Prince Sultan Cardiac Centre in Buraydah, KSA for their cooperation and assistance in this study. The acknowledgment is extending to the deanship of Al-Ghad International Colleges for Applied Medical Sciences for their continual support.

## Declaration

The author declares that no conflicts of interest pertaining to this research exist.

## REFERENCES

- ANA (Producer). (2016). The American Nurses Association. [www.nursingworld.org](http://www.nursingworld.org).
- Armstrong ML (2019). Triggers in Our Pursuit of Continuing Nursing Education. *J Contin Educ Nurs*, 50(3), 99. doi: 10.3928/00220124-20190218-01
- Association AN (2010). *Nursing: Scope and standards of practice*: Nursesbooks.org.
- Dickerson PS, Bernard A (2018). What's in a Word? Understanding Terms in Continuing Nursing Education and Professional Development. *J Contin Educ Nurs*, 49(1), 19-25. doi: 10.3928/00220124-20180102-06
- Dolphin NW (1983). Why do nurses come to continuing education programs? *The Journal of Continuing Education in Nursing*, 14(4), 8-9.
- Dunn J (2015). Continuing Nursing Education and Needs Assessments. *Nebr Nurse*, 48(3), 11.
- Eslamian J, Moeini M, Soleimani M (2015). Challenges in nursing continuing education: A qualitative study. *Iran J Nurs Midwifery Res*, 20(3), 378-386.
- Esquibel KA (2011). The future of nursing and continuing education. *J Contin Educ Nurs*, 42(3), 99-100. doi: 10.3928/00220124-20110222-01
- Garafalo L (2016). Continuing Nursing Education and Outcomes: Making a Difference in Patient Care. *J Contin Educ Nurs*, 47(3), 103-105. doi: 10.3928/00220124-20160218-03
- Jho MY, Kang Y (2016). Perceptions of Continuing Nursing Education in Korea. *J Contin Educ Nurs*, 47(12), 566-572. doi: 10.3928/00220124-20161115-10
- Kfshrc (Producer). (2011). King Faisal Specialist Hospital and Research Centres. <http://www.kfshrc.edu.sa>.
- Lalonde M, Hall LM, Price S, Andrews G, Harris A, MacDonald-Rencz S (2013). Support and access for nursing continuing education in Canadian work environments. *Nurs Leadersh (Tor Ont)*, 26 Spec No 2013, 51-60.
- Nalle MA, Wyatt TH, Myers CR (2010). Continuing education needs of nurses in a voluntary continuing nursing education state. *The J. Continuing Educ. Nursing*, 41(3), 107-115.
- Rouleau G, Gagnon MP, Cote J, Payne-Gagnon J, Hudson E, Bouix-Picasso J, Dubois CA (2017). Effects of e-learning in a continuing education context on nursing care: a review of systematic qualitative, quantitative and mixed studies reviews (protocol). *BMJ Open*, 7(10), e018441. doi: 10.1136/bmjopen-2017-018441
- Senge P (1990, 2006). The fifth discipline: The art and practice of the learning organization. New York, NY.
- Shinners J (2019). Nursing Professional Development and Continuing Education in 2019: Organization, Assessment, and Evaluation. *J Contin Educ Nurs*, 50(1), 6-8. doi: 10.3928/00220124-20190102-02
- Spring S (2010). Nursing professional development: Scope and standards of practice (pp. 83): American Nurses Association & National Nursing Staff Development Organization.
- Spring S (2011). 2013 ANCC primary accreditation application manual for providers and approvers (pp. 106): American Nurses Credentialing Center.
- The Statistical Package for Social Sciences (SPSS) Statistics. (V22.0): IBM.
- Tumulty G (2001). Professional development of nursing in Saudi Arabia. *Journal of Nursing Scholarship*, 33(3), 285-290.
- Wellings CA, Gendek MA, Gallagher SE (2017). Evaluating Continuing Nursing Education: A Qualitative Study of Intention to Change Practice and Perceived Barriers to Knowledge Translation. *J Nurses Prof Dev*, 33(6), 281-286. doi: 10.1097/NND.0395.