



Research Article

Perceptions of Registered Nurses of Continuing Education and Its Impact on Patient Care

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Abstract

Continuing education for nurses is an integral part of their professional development. The literature indicates that nurses with a bachelor's degree are better prepared than nurses with an associate's degree in areas related to quality of patient care, patient safety, evidenced-based practice, project implantation and data analysis. The purpose of this study is to explore the perceptions of registered nurses at Nizwa Hospital on continuing education, barriers to continuing education and perceived strategies to overcome those barriers. In addition, this study is an exploration of nurses' perceptions of the impact of continuing education on patient care. The study followed a descriptive qualitative design. Data from 20 participants were included in this study. Data were collected from semi-structured interviews. Thematic analysis was conducted for data analysis. The results emerged around four main themes: benefits of higher education, barriers to continuing education, strategies to motivate nurses to pursue continuing education and the impact of continuing education on patient care. The theme of benefits of higher education had two subthemes: work-related benefits and personal benefits. The second theme, barriers to continuing education, had two subthemes: personal barriers and work-related barriers. The third theme, strategies to motivate nurses to pursue continuing education, had nine subthemes: promotion, clear carrier plan, proper orientation for the scholarship process, placement based on specialty, involvement, study within one's country or online, release from work, solving staff shortages and financial support. The last theme, the impact of continuing education on patient care, had four subthemes: enhancing patient safety, improving quality of care, enhancing delivery of care and improving integration of theory into patient practice.

Implication for practice: Continuous education is essential for nurses and has a positive effect on the nursing profession, quality of care provided and patient outcomes. This study's results will help the Ministry of Health plan and create polices to empower nurses to continue their education.

Background and Significance

Healthcare is a dynamic system that requires nurses to be innovative and up to date in their knowledge and skills and be lifelong learners [1]. In Oman, the healthcare system is developing and has undergone an accelerated development in the last few years [2]. In 2000, the World Health Organization (WHO) ranked Oman's healthcare system as the 8th-best in the world [3]. Therefore, healthcare providers in Oman are urged to continue updating their knowledge to provide a high quality of care to their citizens. To do so, nurses are urged to continue their education to enhance their profession, patient outcomes and patients' safety [4-5]. Nurses with baccalaureate and master's degrees place patients at less risk for mortality and failure to rescue [6].

Hospitals with a 10% increase in the number of nurses with baccalaureate degrees were associated with decrease of 2.12 deaths for every 1000 patients and 7.47 deaths for every 1000 patients with complications [7]. An increase in the number of nurses with a baccalaureate degree is associated with lower mortality rates, lower likelihoods of readmission, reduces hospital costs and shorter length of hospital stay [8]. In addition, it was found that in hospitals with a large percentage of nurses with a baccalaureate degree, patients had shorter lengths of stay and fewer instances of nurse-sensitive outcomes [9]. The literature indicates that nurses with a baccalaureate degree are better prepared than nurses with an associate's degree in areas related to quality of patient care, patient safety, evidenced-based practice, project implantation and data analysis [8].

Continuing education is beneficial for nurses because it improves their leadership's skills and enhances nurses' confidence [5,10-11]. Nurses are required to be knowledgeable and innovative and to employ evidence-based practices [8]. Continuing education improves nurses' knowledge, technical and cognitive skills and clinical competency [12]. Moreover, continuing education enables nurses to do their job efficiently [13].

Continuous education for nurses is essential and enhances the nursing profession, the quality of care provided and patient outcomes. Therefore, many countries have proposed mandatory continuing education [14]. Some countries even restrict working hours or require nurses to take refresher courses, especially those who are away from work for a long time [15]. The Institute of Medicine (IOM) recommended that by 2020, 80% of registered nurses hold a bachelor degree [4]. Furthermore, 18 US states have considered adopting proposed BSN-in-10 laws, which are intended to increase the number of nurses with a bachelor's degree within 10 years [16]. Some institutions allow nurses to take online continuing education courses, and others have allowed for a limited number of online courses. In addition, employers may

request from nurses a specialty certification, which is important for advancement in the profession, but they require attending a college or university [15]. All these laws were placed on nurses not to burden them but to ensure that they are competent and confident in their profession [17].

In spite of the importance of continuing education to the nursing profession and the fact that many countries have mandated nurses to continue their education as part of their professional development, nurses face some barriers that might prevent them from continuing their education and few nurses seek to acquire a high educational degree [18]. Out of 319 participants, only 70 (25%) participated in continuing educational activities, and more than half did not participate in continuing education activities. Barriers to continuing education could be physical or structural [5]. The physical barriers include staff's personal and life circumstances, such as lack of time at work, lack of financial support and being responsible for child care. Structural barriers include rules and regulations that might limit nurses' opportunities for continuing education [5]. Richards and Potgieter (2010) identified a mix of structural and physical barriers in their studies, including lack of funding, job responsibilities, requirements for obtaining study leave, poor teamwork and cooperation, unclear staff development plans by health care institutions, unsupportive work environments and rare promotion opportunities [5].

Continuing nursing education is an important aspect of nurses' professional development, but nurses might not be able to pursue it because of multiple barriers. The literature indicates that nurses perceived work life, time constraints and financial constraints as barriers [19]. In a study conducted in India, nurses believed that administrative constraints were the most prevalent barriers ($M=2.19, \pm 0.83$), and family and personal barriers were the least perceived [20]. Fentahun and Molla (2012) argued that nurses with more working years of experience and those who have managerial and financial support are more likely to continue their education than nurses who are novices and lack managerial and financial support [18].

Although there are several barriers that might prevent nurses from continuing their education, the literature indicates that there are several strategies that could motivate nurses to do so. Richards and Potgieter (2010) found that the prospect of promotion helps in the development of career pathways and that having a role model, encouragement from management and peer encouragement can motivate nurses to continue their education [5]. Providing financial support and enrolling in flexible courses can also encourage nurses to continue their education [18]. Promotions, length of the program needed to complete the degree, increased knowledge and personal satisfaction are other factors that could motivate nurses to continue their education.

In 1970, there were there were only three hospitals, thirteen physicians and few nurses in Oman [2]. The nursing profession was not well recognized in Oman until the 1900s [21]. Multiple nursing institutes and specialties were originated in Muscat and various regions in Oman to enhance the nursing profession [2]. Over fifty years of development, the nursing profession had witnessed tremendous growth, with the number of nurses reaching 20000 by 2020 [2].

The level of education was also upgraded, and in 2018, Oman College of Health Science was established by royal decree [2]. The Specialty Institute was also upgraded to the Higher Institute for Health Specialty in the same year to enhance and improve nurses' competence in various specialties [2]. Four cohorts of nurses with a bachelor's degree graduated from eight branches and programs [2]. However, despite the effectiveness of continuing education to improve the competency of the nurses and nursing care for patients, fewer nurses have enrolled in continuing education programs in Oman. In Oman, according to the Ministry of Health Statistics (2017), no nurses were registered in nephrology, BSN in community health, nursing management or mental health [22]. In 2017, only five students were enrolled in an infection control program. The figure was not better in 2017 for a midwifery course, in which only two students were enrolled. Therefore, we aim to explore the perceptions of registered nurses at Nizwa Hospital of continuing education, barriers to continuing education and perceived strategies to overcome those barriers. In addition, we will explore nurses' perceptions of the impact of continuing education on patient care.

Methodology

Study Design

This study followed an exploratory descriptive qualitative design to thoroughly explore the perception of registered nurses.

Study Participants

The target population is registered nurses, nursing supervisors and nursing unit heads working in Nizwa hospitals in various departments. Convenience sampling was used to select 20 nurses (N=10 registered nurses & N=10 nursing supervisors and unit heads).

Data Collection Tool

Data was collected using face to face semi-structured interviews, which were audio recorded. The following questions were used to guide the interview and cover the aspects of the study:

- What are your perceptions of continuing education?
- What are the factors that hinder registered nurses from

enrolling in continuing education programs?

- What are the strategies that motivate registered nurses to continue their education?
- What is your perception of the impact of continuing education on patient care?

Data Analysis

Transcribed data from the recorded audio were analyzed using thematic analysis. Demographic data were presented as numbers and percentages.

Ethical Consideration

The Regional Research Committee of Nizwa Hospital approved this study. Participation in the study was voluntary. Informed consent was obtained from participants after they completed an information sheet and received an explanation of the study. The participants' anonymity was maintained throughout the study.

Results

Twenty participants were interviewed. The majority were female, seven (35%) participants had a diploma in nursing and 11 (55%) had a BSN. More than 80% of the participants had more than 10 years of nursing experience. Four main themes emerged from the interviews: registered nurses' perceptions of benefits of continuing higher education, barriers to continuing higher education, strategies to motivate nurses to continue their education and the impact of continuing education on patient care. Quotes are used to support our findings regarding various themes and subthemes.

Benefits of Continuing Higher Education

Two subthemes emerged from the interviews: personal benefits and work-related benefits.

Work-Related Benefits

The first finding from the interviews is that many registered nurses emphasize the importance of continuing education in improving nurses' knowledge and skills. The following quotes were taken from participants' narratives:

"Continuing education is very important for building up my skills and knowledge" (Nurse 2).

"It will improve my life in everything, in my thoughts, how I work, my skills, my knowledge" (Nurse 4).

In addition, few nurses believed that continuing education helps them update their knowledge:

"It is good because we need to know everything in nursing, because nursing does not mean stopping in one spot. Already, they

are giving us something new, and we need to know everything new day by day” (Nurse 8).

Another benefit is that it helps teach other staff about the new guideline:

“Teach all staff the correct things to do it or new guidelines” (Nurse 20).

Personal Benefits

Some registered nurses believe that continuing education leads to increased confidence when a nurse provides care or teaches patients about health issues:

“You will be more confident as you study and practice” (Nurse 11).

“Going for continuous education means your knowledge will be increased, okay, so an increase in knowledge gives you more confidence when you are giving information to the patient” (Nurse 3).

Some participants highlighted the importance of continuing education in developing or improving communication:

“I think it is good to learn and to gain good communication skills” (Nurse 16).

Few nurses believed that continuing education helps in critical thinking:

“It will help in critical thinking” (Nurse 7).

Other nurses indicated the importance of continuing education in obtaining a new position at work:

“If you go pursue higher-level studies-master’s, BSN-you will go from general nursing to a specialist and to the person in charge. Sometimes, you will become head of nursing” (Nurse 14).

Few nurses mentioned the importance of continuing education in personal development:

“The first one is for your personal development so you would develop yourself” (Nurse 7).

Two participants perceived that continuing education helps in decision making:

“It will help you even in decision making and how you will manage your team” (Nurse 7).

Another nurse mentioned that continuing education helps in problem-solving:

“Your thinking will be changed, okay, with regards to critical thinking and problem-solving” (Nurses 11).

Continuing education helps develop leadership:

“Facing a new experience in other hospital, you can build trust and good charisma of leadership and you know how to implement the style of leader in your department” (Nurse 11).

It also helps improve one’s attitude, behavior, competence and accountability:

“It will be improving my life in everything, in my thoughts, how I am doing, my skills, my knowledge, my attitude, and behavior. I will be a competent nurse” (Nurse 4).

“They will be, like, mean, responsible,” Nurse 13 said regarding being a role model. “He will try to change wrong habits, and he will try to be a role model for the others” (Nurse 15).

Barriers to Continuing Education

Two subthemes emerged from the interviews regarding barriers to continuing education: personal barriers and work-related barriers.

Personal Barriers

Family Commitment

The majority of the participants focused on family commitments as a barrier to continuing education for various reasons, such as caring for their children or sickness of any member of the family:

“For those who have families and commitments, it is difficult” (Nurse 12).

“We have so many things, we have families” (Nurse 16).

Degree of Secondary School

“They want to send you for education. They want you to have a degree from secondary school” (Nurse 1).

Degree of Nursing Diploma

“I think also for your graduation that one degree that should be not less than C” (Nurse 19).

Financial Problem

“Some people have financial problems because nowadays, things outside cost too much” (Nurse 4).

Loss of Motivation as They Try Many Times

“For some of them, the motivation is not even there” (Nurse 9).

Work-Related Barriers

No Promotion

This factor is related to no change in grade, no change in the position and no increase in salary:

“Sometimes, maybe they will not give you rights after you finish. I mean you will be in the same position” (Nurse 12).

“We saw our colleagues who went for higher studies, but after coming back, they remained in the same position and no promotion was given to them” (Nurse 18).

“They are thinking if we get this certificate, the promotion will come, but they receive no promotion, the salary will be same, so maybe this is one of the barriers” (Nurse 11).

Continuing Education Requirement

Another important barrier that nurses find hinders them from pursuing high-level studies is the requirements, such as a high grade in ILTS, a work appraisal and a portfolio:

“There are so many difficult requirements for higher study, such as the ILTS 5.5, passing parametric exams and going for interviews. These requirements will make me lose interest in continuing my education” (Nurse 10).

“First, sometimes, the annual appraisal, this one barrier” (Nurse 15).

“So many things are requested or required, like a portfolio” (Nurse 10).

“There are so many strict requirements, ILTS, exams and interviews, so their interest will be little bit less” (Nurse 10).

Limited Number of Seats

The limited number of seats in an important factor in preventing nurses from pursuing continuing education:

“I feel that like the number they are requesting for higher education is not enough because usually, they are hiring two or three staff members per year” (Nurse 18).

Remaining in the Same Department

The hospital is not allowing nurses with specific specialties to change departments for a long time after the completion of the study, and some nurses want to change their place of work:

“They will keep them in the ward for a long time because there is not enough staff here” (Nurse 20).

Staff Shortage

“I cannot release many staff at the same time because we have such a shortage” (Nurse 20).

Lack of Motivation

“One of my staff, she wants to continue her education. She will go for midwifery. When she asks other staff who already went for that

course, they are not motivating her to go” (Nurse 20).

Age

“Sometimes, they do not accept old nurses. There is a specific age” (Nurse 4).

Availability of Degrees in Oman and Lack of Support

“You can’t earn all the degrees here in Oman, so sometimes, it is difficult for us as females” (Nurse 5).

“I think from the administration, there is not always support” (Nurse 15).

“Actually, it will not be clear for them sometimes, what the course itself is” (Nurse 10).

Difficulty in Adjusting

“The nature of the place where we go for completing the study may be a challenge for us and if we are able to interact with people there” (Nurse 8).

Strategies to Motivate Nurses to Pursue Continuing Education

Nurses were asked about the possible strategies to motivate nurses to continue their education. They suggested many strategies that they perceived as effective to do so.

Promotion

“They can upgrade their degree” (Nurse 19).

“They will give them a similar position in their department” (Nurse 19).

“After they study, their position will be changed, and financially, they will be much better off” (Nurse 11).

Clear Career Plan

“Give us the plan once you come back. We check, but where is it?” (Nurse 7).

“They have to plan for them when they came back from their study. They should give them something like a position in the department” (Nurse 9).

Proper Orientation for Scholarship Process

“If I want to send somebody into higher-level studies, I can help him, first of all, in the process of completing their application” (Nurse 9).

Placement Based on Specialty

“Give them like an agreement. If you are going for A&E specialty, you will come back to A&E, and you will not come to general ward” (Nurse 3).

Involvement

“They should encourage them or give them opportunities to participate in hospital events, hospital research or hospital committees” (Nurse 3).

“Talking with them, see the people who took higher education. For example, if you have been working 10 years but I have more qualification, more certificates, see my position, and see your position” (Nurse 4).

Study in One’s Own Country or Online

“Most of the degrees should be available in Oman” (Nurse 5).

“No problem, she will be on duty, and she is doing online” (Nurse, 14).

Release from Work

“Release the staff who want to go” (Nurse 5).

“Releasing from the job” (Nurse 16).

Solve Staff Shortage

“They have to find a solution for that barrier or shortage and release people from the job” (Nurse 16).

Financial Support

“The Ministry is responsible for all tuition fees” (Nurse 16).

The Impact of Continuing Education on Patient Care

Nurses were asked about their beliefs about the effect of continuing education on patient care, and three themes emerged: improved quality of patient care, enhanced delivery of care and enhanced patient safety.

Enhance Patient Safety

“It will lead to proper health care for the patient based on studies” (Nurse 16).

“It will be improved safety, yeah. I mean, they know how to take care of them to prevent medication errors” (Nurse 4).

Improve Quality of Patient Care

Nurses believed that continuing education for staff nurses can enhance the overall quality of care provided for patients.

Nurse 13 stated, “To improve the quality of the care provided to the mother and child.”

“Those who studied can come and spread that knowledge to the one who is there in the service. They can help in improving the service and the delivery of care by maintaining the quality of care” (Nurse 18).

“The stay in the hospital will be shorter” (Nurse 5).

Enhance Delivery of Care

Some nurses in this study believed that continuing their education will help them utilize research practice and enable them to use evidence in their practice when providing care for patients:

“In regard of evidence-based practice, we can change the old habit or old practice which is done in any hospital” (Nurse 9).

Improve Integration of Theory into Practice

“She will gain knowledge... She can also practice that in her clinical” (Nurse 10).

Reduced Morbidity and Cost

“Morbidity will be less” (Nurse 18).

“It is cost effective sometimes, as we can use alternatives in the care of the patient. This is coming from learning” (Nurse 5).

Discussion

We explored registered nurses’ perceptions of the benefits of continuing education, barriers that hinder nurses from continuing education, strategies to motivate nurses to pursue higher education and the impact of continuing education in health care.

Benefits of Continuing Education

This study’s results show that continuing education benefits nurses at work and personally. Regarding work, nurses believed that continuing their education will improve and update their knowledge. This study’s results are consistent with other studies that show that continuing education enhances patient care because nurses have up-to-date knowledge, which enables them to meet patients’ needs professionally [5,14,17,23].

Another finding is that continuing education improves nurses’ clinical skills and enhances their clinical experience. This result is consistent with those of Mlambo, Silèn and McGrath (2021) [12], who found that continuing education improves nurses’ technical and cognitive skills and clinical competency.

This study suggests that continuing education improves nurses’ confidence in their practice and their leadership abilities. These findings are aligned with findings from previous studies that show that continuing education is beneficial for nurses because it improves their leadership’s skills and enhances their confidence [5,10-11].

Other benefits that were mentioned in the results, such as critical thinking and development of communication, need to be researched more.

Barriers That Hinder Nurses from Continuing Education

We found that personal and work-related factors are perceived as barriers to continuing education. Among personal barriers is family commitment, the largest barrier to nurses continuing their study, which includes, for example, childcare. This finding is consistent those by Richards and Potgieter (2010), who found that responsibility for childcare was one of the barriers to nurses continuing their studies [5]. However, family and personal barriers were the least perceived barriers by Indian nurses [20].

This study showed one personal barrier is finances, especially if a nurse wants to continue their studies outside the country or even in their country, where they are responsible for tuition fees. This finding is aligned with that by Penz et al. (2021), who also concluded that financial constraints is one of the factors preventing nurses from pursuing higher education [19].

This study shows some of the significant factors related to the lack of promotion after nurses complete their studies are no change in position, no change in grade, no allowance and no change in salary. This result is aligned with the literature that indicates that lack of promotions is the main barrier to nurses pursuing higher education [24-26].

Obstacles to enrollment include the requirement of a high grade for English language proficiency (ILTS), the limited number of seats, the requirement of a secondary school degree, the requirement of a nursing school degree, interviews, age, appraisal marks, lack of understanding of courses and lack of interest. This finding is aligned with other findings in the literature that indicate that lack of understanding of graduate courses, lack of interest and obstacles to enrollment were reported as barriers to nurses continuing their professional education [27-30].

Very few participants mentioned that sometimes there is no administrative support. For instance, a nurse applying for an administration course might be rejected because they do not hold an administration position but can apply for another specialty. This finding aligns with those by Shinde, Potdar and Kukarni, (2015), who highlighted the significance of administrative constraints as a factor hindering nurses from continuing their education [20].

This study shows another significant barrier to nurses continuing their education is time, especially because nurses work night duty and therefore find it difficult to continue their education due to time constraints. This is evident in the study by Richards and Potgieter (2010) [5].

Strategies to Motivate Nurses to Continue Their Studies

Nurses who participated in this study emphasized the importance of promoting nurses after graduation in motivating nurses to

continue their studies. Promotion may lead to increased salary and a change in grade and position. This finding is supported by Richards and Potgieter's (2010) assessment that nurses perceived that providing promotions and managerial positions are strategies to motivate nurses to continue their study [5].

According to this study, another motivational factor for nurses to continue their study is to release them from shift duty. This result is supported by Lewis et al. (2014), who suggested that providing educational leave for continuing education can motivate nurses to continue their education [31].

Another important strategy is to help nurses in the application process. This strategy is supported by Tayloor and Terhaar's (2018) innovative program, the Guiding Initiative for Doctoral Education, which helps participants understand how to prepare to be successful in doctoral studies [32]. In fact, this strategy is believed to help nurses in the application process. Sarver, Cichra and Kline (2015) found that nurses are motivated if they are supported in their work place [17]. Other strategies to motivate staff to continue education include allowing them to participate in different activities and providing a plan for a nurse after graduation for further research.

Impact of Continuing Education on Patient Care

Nurses believe continuing education enhances overall quality of patient care, which is consistent with the results of the study by Aiken et al. (2012), which indicated that the quality-of-care increases when there is a sufficient number of staff and professional registered nurses [33]. Nonetheless, this study's results contradicted a study conducted in a private hospital [34], which showed no significant relationship between nurses' level of education and quality of care or patient safety. An important finding from this study is that continuing education for nurses enhances patient safety and reduces infection rates and medication errors. The literature indicates that nurses with a baccalaureate degree are better prepared than those with an associate's degree in areas related to patient safety [8].

Participants in this study believed that continuing their education can help them utilize their research practice and enable them to use evidence to build best practices when providing care for the patient. Continuing nursing education is essential for nurses working with patients because the healthcare system is dynamic and consistently changing. Therefore, nurses need to be competent and continue building best practices by continuing their education [14]. Similarly, other studies have shown that nurses with a baccalaureate degree are better prepared than those with an associate's degree in areas related to evidenced-based practice [8]. Furthermore, nurses in this study believed that continuing education can reduce the mortality rate, length of stay and treatment costs, as they did in the study by

Blegen et al. (2013) [9]. Nurses with a baccalaureate degree are associated with reduced mortality rates, likelihood of readmission, hospital costs and length of hospital stays [8].

Conclusion

Continuing higher education is part of the career pathway that can improve nurses' competence and enhance their knowledge and skills [9]. Continuing education for nurses empowers nurses personally and professionally and equips them with competence that enables them to improve the quality of patient care. Nurses faces many personal and professional barriers that hinder them from continuing their education. They need managerial, financial and family support; motivation; and the will to overcome these barriers [17,32]. This study's results will enable the Ministry of Health in Oman to locate areas of weakness and develop a plan to encourage nurses to continue their education. Having nurses with higher degrees can enhance the health system and reduce patient mortality rates, patient length of stay and the cost of care.

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