



AENSI Journals

Advances in Environmental Biology

ISSN-1995-0756 EISSN-1998-1066

Journal home page: <http://www.aensiweb.com/aeb.html>

Students and Lecturers' Viewpoints Regarding Curriculum Modification of Undergraduate Course of Operating Room

Fariba Khayati, Ghader Salehnejad, Simin Nazarian

Faculty Member, School of Nursing and Midwifery, Kurdistan University of Medical Sciences, Sanandaj, Iran.

ARTICLE INFO

Article history:

Received 15 April 2014

Received in revised form 22 May 2014

Accepted 25 May 2014

Available online 15 June 2014

Keywords:

Operating Room, Principle and Function of Surgery Technician as Circulator Unit, Curriculum, Experts

ABSTRACT

Introduction: Training human resources in the field of the operating room is of great importance. The purpose of this study was to separate Nursing Techniques course from Principle and Function of Surgery Technician as Circulator course and to allocate more time to teaching Nursing Techniques course according to respective experts and operating room students. Methods: This study was conducted using the Delphi technique and operating room students' opinion [21 faculty members and teachers of Operating Room Department were selected according to target based method]. After creating the initial framework for teaching, based on general topics of Ministry of Health and Medical Education, multistage pilot with the consensus of at least 70% achieved and then the framework was finalized. Findings: The result of this study was escalating Principle and Function of Surgery Technician as Circulator course from 2 units to 4 units [3 units Nursing Techniques course including theory and practice + 1 unit Principle and Function of Surgery Technician as Circulator]. Students are assessed in theory unit during and at the end of the semester including written exams, testing and explanations, performing weekly quiz and lecturer's opinion. Also Students are assessed practically during and at the end of the semester in practice room and observing their performance using check list and OSCI test at the end of the semester by consensus of 90-100%. Conclusion: In the field of operating room, Nursing Techniques course is taught in Principle and Function of Surgery Technician as Circulator unit and hours devoted to this course is not sufficient and is taught at different universities with different tastes, other hand, given the sensitivity of work of the students in the future, it is necessary to allocate more hours to this unit and teaching them separately. Thus teaching Nursing Techniques and Principle and Function of Surgery Technician as Circulator would be more applicable.

© 2014 AENSI Publisher All rights reserved.

To Cite This Article: Fariba Khayati, Ghader Salehnejad, Simin Nazarian., Students and Lecturers' Viewpoints Regarding Curriculum Modification of Undergraduate Course of Operating Room. *Adv. Environ. Biol.*, 8(9), 805-808, 2014

INTRODUCTION

Operating room as a field of study is a branch of medical sciences that during this course, students become familiar with the new principles of operating rooms and also new technologies and learn to help and manage patients before, during and after operation. It is possible through the development of knowledge and education for Bachelor's degree in operating room. By training these students proper and effective care of patients before, while and after operation, particularly in specialized types of surgeries and scopies is possible, also control and prevention of hospital infections, creating the right emotional conditions for patients and proper maintenance of apparatus and equipment is achieved [1].

Operating room nurses are a group of medical science students who are working in hospital operation sections, emergencies, clinics and doctor offices in a close relation with nominated patients for operation, patients' family and other members of health care team [2]. The goal of an educational system is training efficient skilled manpower. Training skilled technicians in the field of operating room is extremely importance. They should be trained based on community needs and to respond appropriately to those needs, so in addition to supplying the needs of the community in the future, education credits would be prevented. Nowadays, educated operation personnel role in health care system is more than ever and in fact it can be talked about the quality when the student is qualified according to the determined objective in education program. In other word, education and education programs should be able to educate people who are equipped with sufficient knowledge, experience and skill [3].

Corresponding Author: Simin Nazarian, Faculty Member, School of Nursing and Midwifery, Kurdistan University of Medical Sciences, Sanandaj, Iran.
E-mail: sara_nazarian@yahoo.com

Nursing Techniques, Principle and Function of Surgery Technician as Circulator is taught to operating room students which are among the basic units. Currently, in addition to the lack of time to teach the theory and practical units, presenting mentioned units as a course simultaneously leads to confuse students, and also more attention to practical units, makes it necessary to separate them.

The purpose of teaching Principle and Function of Surgery Technician as Circulator course is being familiar with the performance and duties of Circular in operation room. In this course students become familiar with Patient's needs and preparing patients immediately before surgery and learn how to perform them theoretically and practically. Also learn how to prepare the operating room environment and conditions to meet patient needs.

In Zare *et al* study in 2009, aiming to compare the current curriculum of operating room technicians in Iran and international curriculum and suggesting a curriculum for Iranian operating room experts, the results showed that more than 50 percent of courses have utility more than 90 percent and the minimum utility is belonged to hygiene and internal medicine and digestion and tumors operation courses [about 76%]. By modifying these courses ambiguities are cleared and finally the suitable curriculum suggested. They also suggested increasing the number of Principle and Function of Surgery Technician as Circulator unit from 2 to 3 units [4].

Zare *et al* in another study in 2010 titled: "Proposing a syllabus for the operation room B.S. courses in Iran" After collecting the opinions, they found out that two participants were in favor of decreasing the number of units of this course from 3 to 2. They believed that it is better to add one unit to apprenticeship. Also, they suggested changing the course name since it was too long. After consulting, the research team therefore intended to decrease the contents and topics of the course and its number of units was decreased from 3 to 2. Furthermore, its name was modified into "principles and function of circulator" [5].

Researchers believe that the Nursing Techniques unit should be separated from unit Nursing Techniques, Principle and Function of Surgery Technician as Circulator also more hours of time and ultimately more units for this course should be considered. the education group of each faculty should continuously revise the curricula and provide authority with the modified curriculum [6] therefore the purpose of this study was to separate Nursing Techniques course from Principle and Function of Surgery Technician as Circulator course and to allocate more time to teaching Nursing Techniques course according to respective experts and operating room students.

MATERIALS AND METHODS

This is a quantitative and qualitative study conducted using Delphi method. The study subject was Principle and Function of Surgery Technician as Circulator course, and compiling and determining its headings. Faculty members and instructors of this course and operating room students participated in this study. 94 operating room students who were in 2, 4, 6 and 8 semester were selected by census. Also, 21 faculty members and nursing educators from type 1, 2 and 3 Universities from each at least 7 people were selected according to target based method [people who had master or doctorate degree in nursing and had at least 3 years experience of teaching] .

Researcher made questionnaire were given to operating room students of Nursing and Midwifery Faculty of Kurdistan University of Medical Sciences. Before the questionnaires were given, to examine its validity, content validity was used. Thus, the questionnaires were given to 10 faculty members of Nursing and Midwifery Faculty. After applying revision ideas the final questionnaire was achieved. Cronbach's alpha was used to check the reliability, and then the tool was given to 10 students. 15 days later they were given questionnaire again and using Cronbach's alpha, final score of at least 86% was obtained.

The initial questionnaire was prepared according to headings of the Ministry of Health and Medical Education .After ensuring that there was no ambiguity, questionnaires via e-mail were sent to faculty members who were participating in the study. They answered questions according to their ideas, background and experience. Thus, the number of units and syllabuses and some titles and headlines declared and some removed or added. Then questionnaires collected and summed by the researchers and were sent to participants for second stage.

In the second stage in addition to the previous cases, students' evaluation during and at the end of the semester were asked. Considering that in this stage consensus reached more than 80%, the study was terminated. Using descriptive statistics, the data were analyzed. In the qualitative part of this study, Delphi method was used. According to the lecturers' of this field of study consensus of 90% was reached [This method can be used in surveys, planning and investigation] [7, 8, 9].

Results:

The results showed that 4 students [4.3%] had no opinion, namely in relation to separation of Nursing Techniques course from Principle and Function of Surgery Technician as Circulator course were not agree or disagree , While 90 students [95.7%] were agreed with the separation .

The results of lecturers' view showed that 100% of participants agreed to increase the course from 2 to 4 units [3 Units Nursing Techniques including theory and practical and 1 units for Principle and Function of Surgery Technician as Circulator]. 100% of respondents believed that Principle and Function of Surgery

Technician as Circulator courses should be taught as a separate course from Nursing Techniques. 100% of them had the same opinion about teaching practical Nursing Techniques course and practical Principle and Function of Surgery Technician as Circulator course separately. About assessment of students, 80% of respondents have mentioned to assessment methods such as; written tests, essay, master's final assessment during the semester, and weekly quiz. 20% agreed with these methods and also proposed additional methods such as; Case report, using slides and movies and OSCE method.

According to the results a consensus was reached that practical work in practice course after the end of each lesson, student performance observation using checklist and holding an audition using OSCE at the end of semester should be presented for student evaluation in practical Nursing Techniques course. About student evaluation for Principle and Function of Surgery Technician as Circulator course [Theory], a consensus was reached that, written tests, essay, master's final assessment during the semester, and weekly quiz should be used.

Discussion:

In operating room Curriculum to meet social needs is especially important. In addition to individual knowledge and skills students should learn how to use new and advanced devices. Curriculum is planned for operating room students to become skilled to care before, while and after operation. The role of operating room personnel in the health care system is of great importance, therefore sufficient knowledge, experience and skills should be taught to students; because these students are working in the hospital , operating room and emergency room or clinics , and should help patients, patient`s family and other health team members [4].

Operation room nurses are a group of medical sciences students whose activities are in surgery wards of hospitals, urgency units and clinics, in close relation with candidates of surgery operation, family members of patients, and other members of hygienic-medical team[3]. As the surgery operation room is a much more complex environment, individual and team work of members as well as familiarity with specific surgical procedures and team policies are critical to resolve the existing disorders in the patient's status, surgery process, and effective and safe care during surgery operation [13, 14].

Clinical education is critical component of the curriculum to form the basic skills and professional capabilities of students. The purpose of clinical education is to provide opportunities for students to link theoretical knowledge with practical realities. Presencing the bedside students gain experiences, and learned concepts will be used in practice through interacting with environment and instructor.

The role of trained surgery personnel has been increasingly specified in hygienic-medical system. Indeed, quality in medical education will be reached only if students have gained the desirable competencies of the goals determined in educational programs. In other words, education and educational programs should educate professionals who, considering the increasing growth of this science, are equipped with sufficient knowledge, experience, and skills.

Although Zare *et al* in their study suggested to decrease the units of Principle and Function of Surgery Technician as Circulator course from 3 to 2 [5] As results of present study showed we believe not only to increase the number of units from 2 to 4 but also it is better to teach Nursing Techniques course and Principle and Function of Surgery Technician as Circulator course separately. We believe that as far as Surgery Technicians who work in operating rooms are among nursing staff they have to learn nursing techniques. Researchers believe that the time allocated to teach Nursing Techniques is not sufficient.

Students are good criteria to measure, results of this study showed that majority of operating room students were agree to increase the units from 2 to 4 and also to teach Nursing Techniques course and Principle and Function of Surgery Technician as Circulator course separately.

In Kilner study there was significant agreement among the experts as to the desirable attributes of ambulance staff, many of which do not feature in existing ambulance training curriculums [12]. Researcher agree with Kilner and believe that Principle and Function of Surgery Technician as Circulator course should be separated from Nursing Techniques course in order to modify curriculum.

Conclusion:

Educational system is a division of social system whose goals are taken from inputs of environment and society and its outputs are returned to the environment and society. Therefore we conducted this study with the intention of meeting the needs of society and hope to train adequate skilled students in the field of operating room.

Conflict of Interest:

The authors of this study declare that they have no conflict of interest.

ACKNOWLEDGEMENTS

Hereby, many thanks go to the Deputy of Research, Kurdistan University of Medical Sciences for their cooperation and assistance.

REFERENCES

- [1] Ministry Of Health and Medical Education. Availabble :URL: <http://Behdasht.gov.ir/index.aspx?siteid=landpageid=1223>
- [2] Caruthers, B.L., P. Price, T.L. Junge, 2004. Surgical Technology for the Surgical Technologist Study Guide. 1st ed. New York:Delmar Thomson Learning, 13.
- [3] Asilian, A., 2000. Effective factors on quality improvement of education in medical sciences. Proceeding of The 2nd Seminar on Assessing Education in Medical Sciences; 1993 Feb; Tehran, Iran. Tehran: Tehran University of Medical Science, 11. [In Persian].
- [4] Zare, Z ., M. Doosti Irani, A. Arabi, A. Mashhadizadeh, F. Gholami Motlaq, H. Farahmand, M. Rafieian, H. Naji, 2009. Evaluation of the curriculum for undergraduate course of operating room in international level and suggesting an appropriate curriculum for Iran .IJNMR.Spring, 14, (2): 57-63.
- [5] Zare, Z., M. Doosti Irani, A. Aarabi, F. Gholami Motlagh, H. Farahmand, H. Naji, *et al.*, 2010. Proposing a syllabus for the operation room B.S. courses in Iran. Iran J Nurs Midwifery Res, 15[Suppl1]: 311-321.
- [6] The complete educational guidelines. Isfahan University of Medical Sciences and Health. Vice President of Education.2004-5. [In Persian].
- [7] Khayati, F., K. Sedaghat, 2009. Reviewing and explaining the Curriculum of public health using experts opinion in Resaerch Project.Kurdistan University of Medical Sciences. [In Persian].
- [8] Abed Saeedi, G., S. Amir Ali Akbari, 2008. Methods in medical research.Tehran,Salemi.
- [9] Haeri, H., Golchin, M. Ziai S.H. Salehi, 2006. NICU nurse in a positive state standards based on international standards. The First National Conference of Standards, development and health, Kermanshah,Iran.
- [10] Association of Surgical Technologists, 2011. <http://www.ast.org>.
- [11] Black, J., J.H. Hawks, 2004. 7th ed. Saunders: Medical-Surgical Nursing: Clinical Management for Positive Outcomes, Single Volume [MEDICAL SURGICAL NURSING- 1 VOL [BLACK.LUCKMANN]]
- [12] Kilner, T., 2004. Desirable attributes of the ambulance technician, paramedic, and clinical supervisor: findings from a Delphi study. Emerg Med J., 21(3): 374-8.