A survey of the views of nursing school students to the benefits of using Clinical Skills Learning Center

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ABSTRACT

Training practical works is changed considerably in two recent decades in medical Sciences and nursing schools and it is inclined to the development of training in clinical skills training and it is required to investigate the effect of these centers on learning of clinical skills by students. The present study investigated the views of students to the benefits of using Clinical Skills Learning Center. In a descriptive-cross section study, 207 nursing students (operation room, midwifery and nursing) of Zahedan were selected as stratified sampling method during academic year 2012-2013. The data collection measure was questionnaire including two parts, first demographic information (gender, age, field and academic level) and second part was dedicated to the benefits of using clinical skill centers with 14 questions. The scoring was based on 5-item Likert scale ranging strongly agree =5 to strongly disagree =1. The content and face validity was supported by the views of experts and its reliability was calculated by Cronbach's alpha 0.79. The data were analyzed by descriptive statistics and T-test by SPSS 18 software with confidence interval 95%. Based on the results "If reviewing the skill in Clinical Skills Learning Center is with video, brochure and computer, skill learning is easier" (with the highest score of strongly agree=117). But the highest strongly disagree with question "in skills center, the student learns how to manage the patient under critical conditions and learn how to work in real environment" (strongly disagree=47). One-way variance analysis of the respondents in terms of academic field showed that there is difference among the three groups in academic field (nursing, midwifery and operation room) of the students in the benefits of using clinical skill center (α<0.05). Tukey test showed that there is difference in academic field (nursing with midwifery) but there was no difference in academic field of operation room with midwifery. The results of the above study showed that the benefits of using clinical skill center is effective in clinical training and improving it for nursing, midwifery and operation room students and this importance is the requirement of appropriate planning by considering the theoretical knowledge of the students in clinical skill center by the authorities.

Keywords: Clinical skill center, Student, Nursing school
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INTRODUCTION

One of the features of Medical Sciences education is the necessity of learning practical and communication skills beside cognitive and theoretical fields. This medical training feature caused that Medical Sciences students in traditional clinical education with their teachers start observing and practicing practical and communication skills[1]. Due to short period of hospitalization in hospitals, sub specialization of beds in hospitals and increase of patients caring in the society, most of the patients in hospitals don't provide a good position to learn basic clinical skills of students. Based on the limitations of learning at the bed of patient and more emphasis on patients' rights,

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today, it is more emphasize on teaching clinical and communication skills and creating good attitude among the students in cyber spaces [2].

The activities in nursing and midwifery are a combination of clinical skills and knowledge to meet the demands of patients and their families. Thus, a midwifery and nursing student besides learning acquires clinical skills during his schooling [3]. Clinic is of great importance in medical education centers and the real concept of training in clinic is preparation for close relationship between basic scientific information of the student with skills, diagnosis, patient's treatment and achieving different types of professional skills. Clinical learning requires achieving clinical experience by the student and practicing required skills via observation, participation, designing treatment method and using it by considering all clinical aspects under the supervision of the trainer[4]. Clinical training is preparing the students to make basic scientific information consistent with skills, diagnosis, and treatment, caring the patients and achieving different types of professional skills [5].

However, clinical environments have unpredicted features and this caused that students training is affected considerably and the role of clinical teachers are more emphasized as some educational experts considered clinical teaching more important than theoretical teaching [6].The goal of clinical teaching is creating required opportunities in order that the students can fill the gap between theoretical realities and practical realities [7]. The improvement of the quality of training can present more empowered students in clinical field [8]. Thus, training courses can be of crucial importance in formation of required practical skills and professional empowerment of students and they are the major part of curriculums [9]. Indeed, clinical environment is the place in which the students learn who to combined theoretical sciences with practice [10].

According to a survey regarding the satisfaction of nursing students of Clinical Skills Learning Center, the students believed that Clinical Skills Learning Center can close the gap between theory and practice. In most universities in the world, Clinical Skills Learning Center is gradually included in their course and they spend for 1-2 hours per week in clinical skill centers [11].

Thus, achieving appropriate clinical skills is an important process in training health services and to achieve such services, a center called Clinical Skills Learning Center [CSLC] or a center affiliated to hospital is necessary[12]. Clinical Skills Learning Center is applied widely in clinical learning namely among nursing and midwifery during 1998-1999[13].

Clinical Skills Learning Center is required to facilitate learning medical sciences among the students to prepare them for the first contact with the patient. Clinical Skills Learning Center closes the gap between theory and practice. Learning skills without being in real environments is an enjoyable free from stress for students and provides required preparation for clinical experience in hospital [14]. The activities of Clinical Skills Learning Center can be explained in training communication skills and interview of physical examination skills, training diagnosis, laboratory and therapy skills, evaluation of students and holding different workshops [15]. Besides teaching examination techniques and Procedural Skills, communication skills are also considered in clinical skills learning center. The application of teaching clinical skills is different based on the teaching goals of each university and the extension of target groups [1]

Ahmed [16] stated the benefits of clinical skills learning center as the lack of real patient and less stress of the students and as the student practices with Moulage, he has less fear and anxiety and if he is not good at it, he can correct his mistake and this increases educational productivity among the students. One of the reasons of reduction of clinical teaching from beds in hospital to clinical learning centers is the increase of students, less educational spaces in hospitals, students stress in the first contact with the patient and etc [17].

We can use many methods, simulation models, Simulated patient, audiovisual equipment, computer or physical examination tools in education[1]. We can use various educational methods as: lecture, small group discussion, virtual simulation technologies, practical works tools, role play, models, simulation models and Moulage and multimedia to teach and practice mental, communication and practical skills[18]. Thus, a successful clinical skill learning center should have flexibility, appropriate planning and educational plan in accordance to educational goals of university. To achieve this, we require appropriate planning [19]. In the 1960s, observation studies showed that learning at the bedside accounted for 75% of clinical teaching, in 2008, that percentage had fallen to 20% and clinical teachings were extended to conference halls and corridors [16].

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To improve learners' skills in various levels, we should apply new methods in order than students and assistants learn necessary skills under the direct supervision of teachers before encountering with real patients and receive their feedbacks and be sure they don't damage the patient during practical examination and they are not ashamed of learning [20]. Clinical skills learning center in response to the changes in teaching method provides an opportunity that clinical students can increase their clinical and communication skills in a relaxed and controlled environment by different educational aids as simulation models [21]. A study was conducted on nursing students of Shiraz and it found the increase of professional role acceptance and knowing work value by nursing students by working in clinical skills learning center [17]. According to Manning , students use critical thinking in clinical skill center and by working on Moulage and simulation models feel comfortable and satisfied and they will have less fear and more confidence to work at the bed of patient [22].

A study on 20 clinical skills center in all over the world via internet and reviewing the articles of clinical skill learning centers in the world was done by Jafari. He showed that clinical skills learning center can link theory and practice and thus, the fear and stress of the student is reduced in initial encounter and communication skills of the students will be improved [17].

The results of a study aimed to investigate the effect of education in clinical skill center on the skills of medicine students [25 senior students] in 2002 showed that the skill of students was increased significantly after receiving clinical skills learning. The researchers proposed to develop clinical skills learning center to reduce mental stresses of students, physical injury to the patients and increase self-confidence of students and reduce the practical work risks by learning clinical skills [12]. In some clinical centers, target group is only medicine students while in most centers, nursing, midwifery, dentistry, and pharmacy even medicine department students can use the facilities of clinical skills center [23]. Based on the importance of training in clinical skill center, the above study is conducted with the aim of investigation of nursing students of Zahedan to the teaching benefits in clinical skills learning center.

MATERIALS AND METHODS

The study is descriptive-cross sectional design and the views of nursing students of Zahedan to the benefits of using clinical skill learning centers during 2012-2013 were investigated and compared. The study population is including all nursing students including (operation room, midwifery and nursing). 207 people as separated nursing school students (nursing=100, midwifery =38 and operation room=69) were selected by stratified sampling method. The data collection measure was questionnaire including two parts, first demographic information (gender, age, field and academic level) and second part was dedicated to the benefits of using clinical skill centers with 14 questions. The scoring was based on 5-item Likert scale ranging strongly agree =5 to strongly disagree =1. The content and face validity was supported by the views of experts and its reliability was calculated by Cronbach's alpha 0.79. In a study similar to Mostafazade et al(17) its validity and reliability was supported. The data were analyzed by descriptive statistics and T-test by SPSS 18 software with confidence interval 95%.

RESULTS

In this study, the views of 207 nursing, midwifery and operation room were investigated and their age mean was 21.43 years. The nursing students were 48.2%, midwifery 18.3%, operation room 33.3% and male students 39.1% and female students 60.9%. The frequency distribution, percent and mean of the views of the nursing school students to the benefits of using clinical skills learning center are shown in Table 1.

Based on the results of Table 1, question 11 "If skills in clinical skills learning are with video, brochure and computer, skill learning is facilitated" (had highest strongly agree score =117) and then question 6" I think the student should use frequently of skills center in a week"(strongly agree=113). The highest response of strongly disagree of question 4" In skills center, the students learn how to manage the patient under critical conditions and they learn the ability of working in real situation" (strongly disagree=47 and then question 8" By practicing in skills center, the student uses professional ethics at the patient bed" (strongly disagree=38) were achieved. Table 2 showed the one-way variance analysis of the respondents in terms of their academic field.

Table 1- Frequency distribution, percent and mean of the views of nursing school students to the benefits of using clinical skills center

Questions	Statistical index	Strongly disagree	Strongly disagree	No Idea	Agree	Strongly agree	Mean
I think the students need much time to practice clinical skills and practice the skills without any stress with full preparation.	F	2	18	37	106	44	4.11
	%	0.009	0.09	0.18	0.51	0.21	
After the explanations of tutor in clinical skills center, I can practice alone.	F	5	12	30	98	62	3.89
	%	0.02	0.06	.015	0.47	0.30	
In skills center, I practice with the aid of tutor until I learn them completely and continue until I learn educational subject and increasing the speed of learning the skills.	F	0	7	23	85	92	3.98
	%	0	0.04	0.11	0.41	0.44	
In skills center, the students learn how to manage the patient under critical conditions and they learn the ability of working in real situation.	F	47	58	55	29	18	3.02
	%	0.23	0.28	0.26	0.14	0.09	
The numbers of educational skills are more in skills center and we can learn more skills during a day in an educational session.	F	1	13	42	89	62	3.72
	%	0.005	0.07	0.20	0.43	0.30	
I think the student should use frequently of skills center in a week	F	0	1	17	76	113	4.36
	%	0	0.005	0.082	0.37	0.54	
I think the student practices skills and learn communication skill with others in skills center.	F	11	19	47	61	69	3.64
	%	0.053	0.091	0.227	0.294	0.335	
By practicing in skills center, the student uses professional ethics at the patient bed.	F	38	64	76	22	7	2.96
	%	0.183	0.309	0.367	0.106	0.03	
One of the benefits of skills center is that there is no real patient and the skill is practice on moulage and the student prepares himself to work at the real bed.	F	1	9	29	73	95	3.71
	%	0.005	0.043	0.14	0.35	0.46	
I think, for better learning after practicing the skills in skills center, we should experience that skill in real situation.	F	0	5	25	74	103	4.02
	%	0	0.024	0.12	0.357	0.497	
If skills in clinical skills learning are with video, brochure and computer, skill learning is facilitated.	F	1	2	16	71	117	4.39
	%	0.005	0.009	0.077	0.34	0.565	
In clinical skills center, the student learns working in small groups.	F	0	4	2	93	108	4.26
	%	0	0.019	0.009	0.45	0.52	
The evaluation methods at the bed are explained by tutor to the student in clinical skills center.	F	1	7	10	113	76	4.18
	%	0.005	0.033	0.05	0.545	0.367	
I think, clinical skills center links theory and practice and there is a good relationship between theory and transferring the learning to bed of patient.	F	3	12	39	64	89	4.09
	%	0.014	0.057	0.188	0.309	0.429	

Table 2- One-way variance analysis of the variable to the benefits of using clinical skills center based on academic field

Study variables	Variance	Sum of squares	Degree of freedom	Mean of squares	F	Significance
Academic field	Inter-groups	1058.64	2	529.3	4.16	0.017
	Intra-groups	24557.2	204	127.2	-	-
	Total	25615.8	206	-	-	-

As shown in Table 2, there is a difference between three groups in terms of academic field (nursing, midwifery and operation room) of the students in benefits of using clinical skills center ($\alpha < 0.05$). It means that academic field of students is different in their views about the benefits of using clinical skills center. To study the different groups in the mentioned variable, refer to Tukey test. Table 3 indicates Tukey test that is done to determine the mean difference among the three groups of academic field.

Table 3- Tukey test to show the difference between academic fields in terms of the variable of benefits of using clinical skills center

Employment condition		Standard error	Difference mean	Significance level
Nursing	Operation room	0.69 0.42	0.79 1.23	0.48
Operation room	Midwifery	0.69 0.67	-0.79 0.43	0.012
Nursing	Nursing midwifery	0.42 0.67	-1.23 -0.439	0.48

As shown in Table 3, the mean of the benefits of using clinical skills center was different in terms of academic field (nursing and midwifery) but there was no difference in terms of academic field of operation room and midwifery.

DISCUSSION AND CONCLUSION

The present study aimed to investigate the views of the nursing students to the benefits of using clinical skills center. The results in Table 1 showed the frequency distribution, percent and mean of the views of nursing students to the benefits of using clinical skills center. The results of the question "I think the students need much time to practice

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clinical skills and practice the skills without any stress with full preparation" showed that 51% of the students agreed about having much time for practicing the skills and doing the exercises without stress and only 0.09 disagreed. But the question "After the explanations of tutor in clinical skills center, I can practice alone" showed that 30% of the students agreed with individual practice after tutor guidance and 47% agreed and a few of them disagreed and were completely disagree with individual practice after tutor guidance. Also, the question "In skills center, I practice with the aid of tutor until I learn them completely and continue until I learn educational subject and increasing the speed of learning the skills", the results showed that 44% of students were agree about until they didn't learn skill practice carefully with the aid of tutor and no respondent was strongly disagree with this question among the student views. It seems that when people need to master learning skills namely motor-mental skill that before doing the activities repeated the skill many times and most students agreed about clinical learning and skill. Baillie &Curzio(24) in a study showed that before entering clinical field, when the students practice in clinical skills centers, their stress and anxiety is reduced and they learn the skills easily. Also, Edgecombe & Bowden (25)believed that the clinical skills center is student-based and the tutor plays the role of director and all the activities are done by students. Question "In skills center, the students learn how to manage the patient under critical conditions and they learn the ability of working in real situation" showed that only about 1% of students agreed about the factor that students are prepared to manage the patient and work in real situation after learning the skills under critical conditions and about 50% disagreed that they are prepared to manage the patient and work in real situation after learning the skills under critical conditions. As students in clinical skills to learn the skills try to use only their individual knowledge and information based on the theoretical information they learned in the past and this perception error causes that they get help less of the tutor. This causes that they can use their learning under real situations in encountering with patient under critical conditions and if they participate in clinical skills center based on the schedule and interest, they can create creative thinking and problem solving under specific conditions. The results of the study ofPapastavrou et al (26) showed that the students of nursing, midwifery and medicine had problem solving and critical thinking capability after attending the clinical skills center and they find better methods for treatment at the real bed of patient and their self-confidence is increased. The question "more skills are taught in skills center and we can learn more skills during a day in an educational session". The results showed that about 73% of students were strongly agree and agree about learning more skills during a day and an educational session and only about lower than 1% of students disagreed that more skills are learnt in an educational session. Also, the question "the student should use skills center many times in a week" more than 90% were agree for some days in a week. It seems that learning skills in clinical skills center with the continuance of attendance in the center and based on the existing facilities in educational space considered as a part of learning during work, many skills are taught during activities. The results of the study are consistent with the study ofBorneuf&, Haigh (27). Most of the students disagreed about the question "by practicing in skills center, the student learn professional ethics at the bed". The results of the study showed that about 48% of the students were strongly disagree and disagree with the fact that the student learn professional ethics at the bed by practicing in skills center. Only about 10% of students agreed about learning professional ethics in clinical skills center activities. It seems that as the change of ethics and attitudes takes a long process in establishment of people personality, the students were not consistent with the clinical skills center courses and the philosophy of clinical skills center and professional ethics and learning need ethic based culture in University space. The results were not consistent with the findings of a study in Shiraz cited in Mostafazade et al(17) and working in clinical skills center improved professional role acceptance and considering work value by nursing students. To evaluate the benefits of using clinical skills center in rest of the questions, the results showed that more than 5% of the students were strongly agree and agree about using moulage and simulation model in clinical skill practice, using the learnt skill in real situation and in small groups, using computer and video in practices and linking theory and practice in this center. The results were in line with the study of Borneuf&, Haigh (27), Ahmed (16), Salehi et al (9) and Davis et al., (10). Also, one-way variance analysis of the respondents in terms of academic field showed that there is a difference between three groups in academic field (nursing, midwifery and operation room) of the students in the benefits of using clinical skills learning center ($\alpha<0.05$). Tukey test showed that there is difference in academic field condition (nursing with midwifery) but there was no difference in terms of academic field of operation room and midwifery. Based on the results, nursing students were 50% male and they learnt skills already, they had different views to midwifery and operation room students. It can be said that previous learnt skills of the students are effective on their further learning. In the study of Pazande et al., (28) it was found that clinical skills training center provides an opportunity that medical students by education aids and simulation models can increase their clinical and communication skills in a relaxed environment. The results of a study with the aim of the effect of training in clinical skills center on medical students skill (25 senior students) in 2002 showed that the skill of students was increased significantly after receiving clinical skills learning. The researchers proposed

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to develop clinical skills learning center to reduce mental stresses of students, physical injury to the patients and increase self-confidence of students and reduce the practical work risks by learning clinical skills (12).

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