

STATUS OF CLINICAL TRAINING OF ACADEMIC STAFF TO MEDICAL STUDENTS IN KURDISTAN REGION: A CROSS-SECTIONAL STUDY

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ABSTRACT

Introduction: Clinical supervision plays a significant role in nursing and medical practice. We aimed to explore the experiences of medicine and nursing students from the clinical educational supervision.

Material and methods: In this cross-sectional study, 144 students of colleges of nursing ($n = 88$) and medicine ($n = 56$) of the University of Duhok, who were receiving clinical training for clinical-based subjects at colleges of nursing and medicine at University of Duhok in Kurdistan Region were included in a convenient way.

Results: The study found that 57.64% were satisfied with the clinical supervision and mostly had positive perceptions. The total clinical supervision score, trust/rapport, supervisor advice, support, improve care/skills, improvement/value of clinical supervision, funding time, personal issues, and reflection were significantly higher among medicine students. The medicine students were more likely to be satisfied with clinical training characteristics and had longer clinical training compared to the nursing students: 19-24 months (44.64%) vs. 1-6 months (70.45%; $p < 0.0001$), respectively. The entire clinical training (100%) among medicine students was weekly compared to weekly (86.36%), 2-weekly (3.41%), monthly (6.82%), and over 3 months (3.41%) among nursing students ($p = 0.0397$).

Conclusions: The medicine students were more likely to be satisfied with clinical supervision compared to the nursing students. This satisfaction was associated with longer and weekly duration of training. The weaknesses of clinical supervision can guide supervisors to improve clinical education. We suggest that the entire fourth year be devoted to clinical training at the nursing college. In addition, one-to-one clinical training techniques be applied to both nursing and medicine colleges. We suggest the issues of clinical supervision be examined in more detail through some qualitative studies. The quantitative studies may not uncover the real problems of clinical supervision of medical students.

Key words: clinical mentoring, clinical supervision, nursing, medicine.

INTRODUCTION

Background and definitions

Clinical supervision plays a significant role in nursing and medical practice [1]. Clinical supervision is crucial for the improvement of medicine and nursing care. Clinical supervision is considered to be a mechanism for supporting nursing and medicine students in clinical settings [2]. It could increase the reflection of clinical practice, decrease work-associated stress and burnout, and improve healthcare quality [3, 4].

Clinical supervision is defined as a mechanism that trains medical students in their profession through a series of clinical activities to ensure giving safe and timely healthcare to patients [5]. Clinical supervision could be direct or indirect supervision by a clinical supervisor in professional projects or performed processes by a student or group of students in clinical settings.

Learning at the workplace is a significant contributor to competence development in preparation for

clinical practice [6-8]. Competencies such as clinical skills, communication, and interpersonal skills, which are achieved during learning at the workplace, have a significant impact on patient care [9]. We believe that the integration of didactic knowledge and experiential learning should occur from the very beginning of medical education.

Research problem and rationale of the study

Research has identified several factors that negatively impact the clinical performance of students. These include limited opportunities for students to practice in teaching hospitals, inadequacy or unavailability of educators, clinical instructors, and mentors, and too many students in the program [10]. It is important to understand the experiences of medical students because clinical supervisors are important sources of medical information for the students. In addition, the techniques of training play important roles

in improving the quality of health care [11]. However, there are limited studies supporting the importance and value of supervision in clinical settings, especially in this region. The evaluation of clinical training is a vital attempt to assess the progress of students' skills and knowledge. The results of this evaluation affect the performance appraisal, academic improvement, and promotion of the overall clinical supervision. Successful clinical training is important to the overall achievement of goals, teaching standards, process skills or abilities in clinical care, and evaluation of curriculum. The improvement in clinical teaching leads to better learning outcomes for the students, improved clinical care for the patients and customers, and a better educational program for the university.

Aim and objectives

We aimed to explore the experiences of medicine and nursing students regarding the clinical educational supervision. In addition, we explore of the level of satisfaction to clinical supervision among nursing and medicine students at the University of Duhok. Also, the factors associated with the level of satisfaction and clinical supervision were examined in this study.

MATERIAL AND METHODS

Study design and sampling technique

The students of colleges of nursing and medicine of the University of Duhok, who were receiving clinical training for the clinical-based subjects were included in this cross-sectional study. The students who were registered for the academic year 2019-2020 for the colleges of nursing and medicine were invited to participate in this study in a non-random way. The students were receiving clinical training in the following 5 main public hospitals in Duhok city in Iraqi Kurdistan: Azadi Teaching Hospital (for adult population diseases), Heevi Paediatric Teaching Hospital (for child and adolescent diseases), and Duhok Emergency Teaching Hospital (for emergent and urgent diseases and conditions).

The population of this study comprised nursing (third and fourth stages) and medicine students (fourth-sixth stages). These stages were selected as the population of the study because these stages have clinical training at teaching hospitals only. Of the total 145 students of the College of Medicine and 135 students of the College of Nursing; 56 (36.62%) and 88 (65.2%) students were included in this study, respectively. The students were invited via a convenience technique at the above-mentioned hospitals.

The population of this study had different socio-demographic characteristics, such as age, gender, religion, and cultural background. In addition, they were receiving training in different clinical departments,

such as emergency, internal medicine, oncology, radiology, surgery, dermatology, infectious diseases, etc. The data collection was performed between February and May 2019.

Inclusion and exclusion criteria

In this study, we invited students of both genders without restriction of age or other socio-demographic aspects. The students who were not available during the data collection or did not intend to participate were not included in this study.

Settings of the study

The site of this study is the University of Duhok (UoD) in Duhok city in Iraqi Kurdistan. The UoD is the main public university in Duhok province. It has 22,942 undergraduate students. The UoD has 19 colleges including 5 medical colleges. However, we included 2 main medical colleges in this study. In addition, the settings of this study were the main public hospitals in Duhok province. The settings were Azadi Teaching Hospital, Duhok Emergency Teaching Hospital, Heevi Paediatric Teaching Hospital, and Duhok Maternity Teaching Hospital.

Study tool (level of clinical supervision)

The Manchester Clinical Supervision Scale-26 (MCSS-26) was used to measure the clinical supervision of tutors. It measures the perceptions of medical students towards clinical supervision effectiveness. It has 26 items including 3 domains of clinical supervision. The scale has 7 subscales: trust/rapport; supervisor advice/support; improved care/skills; importance/value of clinical supervision; funding time; personal issues; and reflection. The responses to the items are measured on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*). An internal consistency of 0.8646 was obtained in this study. The scores of the items are added together to obtain a total clinical supervision score between 0 and 88. Some items are reverse scored on this scale [12]. The higher the score the higher the level of effectiveness of clinical supervision from the students' perspectives.

The definitions of the subscales of the MCSS-26 are:

Importance/value of clinical supervision: This subscale assesses the perception of the students towards the importance of clinical supervision in clinical settings.

Funding time: This subscale assesses the perceptions of the students towards the time devoted to clinical supervision at the hospitals.

Trust/rapport: This subscale assesses the perceptions of students towards the trust/rapport with the clinical supervisor and the confidence of the supervisors in discussing confidential or sensitive issues.

Supervisor advice/support: This subscale assesses the perceptions of students towards support, advice, and guidance given by clinical supervisors.

Table 1. General and clinical training characteristics of students

Clinical training characteristic (n = 144)	Statistics	
	No (%)	95% CI
Age (20-30 years)	Mean: 23.50	SD: 2.02
Gender		
Men	49 (34.03)	26.79-42.09
Women	95 (65.97)	57.91-73.21
College		
Medicine	56 (38.89)	31.31-47.04
Nursing	88 (61.11)	52.96-68.69
Clinical training duration (months), 1-24 months	Mean: 12.42	SD: 7.59
1-6 months	62 (43.06)	35.25-51.22
7-12 months	15 (10.42)	6.41-16.48
13-18 months	41 (28.47)	21.74-36.33
19-24 months	26 (18.06)	12.63-25.14
Clinical training frequency		
Weekly	132 (91.67)	86.00-95.17
Every 2 weeks	3 (2.08)	0.71-5.95
Monthly	6 (4.17)	1.92-8.79
Over 3 months apart	3 (2.08)	0.71-5.95
Clinical training setting		
Within the workplace	129 (89.58)	83.52-93.59
In and away from the workplace	10 (6.94)	3.82-12.31
Away from the workplace	5 (3.47)	1.49-7.87
Clinical training technique		
One-to-one	6 (4.17)	1.92-8.79
Group	133 (92.36)	86.84-95.68
Combination of one-to-one and group	5 (3.47)	1.49-7.87
Clinical training duration		
Less than 30 minutes	10 (6.94)	3.82-12.31
31 to 60 minutes	14 (9.72)	5.88-15.66
More than 60 minutes	120 (83.33)	76.40-88.54
Level of satisfaction		
Moderately dissatisfied	42 (29.17)	22.36-37.05
Moderately satisfied	42 (29.17)	22.36-37.05
Neither satisfied, nor dissatisfied	13 (9.03)	5.35-14.83
Very dissatisfied	6 (4.17)	1.92-8.79
Very satisfied	41 (28.47)	21.74-36.33
Satisfaction		
Dissatisfied	48 (33.33)	26.16-41.38
Neither satisfied, nor dissatisfied	13 (9.03)	5.35-14.83
Satisfied	83 (57.64)	49.47-65.41

Improved care/skills: This subscale assesses the perceptions of students towards the clinical supervision and delivery of care and improvement skills.

Reflection: This subscale assesses the perceptions of students towards support in clinical experiences.

Validity and reliability

The previously created measurement tool was used for the measurement of clinical supervision. It has been validated previously by appropriate experts in the literature [12]. A Cronbach's α of 0.8646 was obtained for this study (internal consistency). Other variables were obtained from the literature.

Statistical analysis

The general information of the students was presented as mean (SD) or number (%). The uncertainty of the general and clinical training characteristics are presented in a 95% confidence interval. The satisfaction rate was determined as the number and percentage. The frequency distribution of MCSS-26 among nursing and medicine students was determined as the number and percentage. The level of clinical supervision between nursing and medicine colleges was examined using an independent *t*-test. The comparisons of clinical training characteristics between nursing and medicine colleges and the association of the level of satisfaction with clinical training characteristics among students were examined using the Pearson χ^2 test. The predictors of clinical supervision score were determined in standard least squares with affect leverage. The significant level of difference was determined by a *p*-value < 0.05. The statistical calculations were performed in JMP Pro 14.3.0.

Ethical views

We obtained verbal consent from the students for this study. Participation in the study was completely optional. We protected the confidentiality of the personal information of the students. Of the total 154 students who were invited to this study, 7 refused to participate. We excluded 3 students from the analysis due to missing information in their questionnaires.

RESULTS

Sociodemographic characteristics of the sample

The mean age of the students was 23.5 years, ranging between 20 and 30 years. The students comprised males 34.03% and females 65.97% and were from medicine (38.89%) and nursing (61.11%) colleges. The clinical training duration of the students was mostly between 1 and 6 months (43.06%) followed by 13-18 months (28.47%) and was mostly weekly (91.67%)

and within the workplace (89.58%), by group training technique (92.36%), and lasted for more than 60 minutes (83.33%). The study found that 57.64% were satisfied with the clinical supervision, including very satisfied (28.47%) and moderately satisfied (29.17%) (Table 1).

Frequency distribution and level of clinical supervision

Most of the students believed that other work pressures did not interfere with their clinical training sessions (42.36%). Most of the students believed that clinical training allows them to practice their skills (51.39%), work problems can be solved constructively during clinical training sessions (41.67%), clinical training sessions facilitate their clinical practice (49.31%), their instructors' training advice is applicable in hos-

pital (48.61%), and they can discuss sensitive issues encountered during their clinical casework with their instructor (44.44%). In addition, they believed that their clinical training sessions are an important part of their work routine (47.92%) and that they learn from their supervisor's experiences (50.0%). They believed that it is important to schedule time for clinical training sessions (43.06%), their instructors provide valuable advice (45.83%), their instructors are easy-going (comfortable) (47.92%), and sessions with their instructors widen their clinical knowledge base (43.06%). Also, the clinical training makes them better practitioners (46.53%), they can widen their skill base during their clinical training sessions (48.61%), their instructors offer them guidance about patient/client care (55.56%), and they think receiving clinical training improves the quality of care they give (45.83%) (Table 2).

Table 2. Frequency distribution of MCSS-26 among nursing and medicine students

MCSS-26 (n = 144)	Frequency of clinical supervision, no (%)				
	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
Other work pressures interfere with our clinical training sessions	21 (14.58)	61 (42.36)	12 (8.33)	27 (18.75)	23 (15.97)
It is difficult to find the time for clinical training sessions	18 (12.50)	47 (32.64)	16 (11.11)	38 (26.39)	25 (17.36)
Clinical training sessions are not necessary/don't solve anything	12 (8.33)	33 (22.92)	15 (10.42)	47 (32.64)	37 (25.69)
Time spent on clinical training takes me away from my real work in the clinical area	15 (10.42)	39 (27.08)	18 (12.50)	41 (28.47)	31 (21.53)
Clinical training sessions can lead to more pressure at work in hospital	13 (9.03)	55 (38.19)	20 (13.89)	32 (22.22)	24 (16.67)
Clinical training sessions are time consuming	20 (13.89)	41 (28.47)	19 (13.19)	34 (23.61)	30 (20.83)
My instructor gives me support and encouragement during training	5 (3.47)	19 (13.19)	18 (12.50)	58 (40.28)	44 (30.56)
Clinical training sessions are intrusive/disruptive	20 (13.89)	42 (29.17)	46 (31.94)	32 (22.22)	4 (2.78)
Clinical training gives me the opportunity to practice my skills	4 (2.78)	21 (14.58)	16 (11.11)	74 (51.39)	29 (20.14)
Work problems can be solved constructively during clinical training sessions	8 (5.56)	36 (25.00)	17 (11.81)	60 (41.67)	23 (15.97)
Clinical training sessions facilitate my clinical practice	7 (4.86)	19 (13.19)	17 (11.81)	71 (49.31)	30 (20.83)
My instructor training advice are applicable in hospital	8 (5.56)	18 (12.50)	16 (11.11)	70 (48.61)	32 (22.22)
I can discuss sensitive issues encountered during my clinical casework with my instructor	9 (6.25)	19 (13.19)	17 (11.81)	64 (44.44)	35 (24.31)
My clinical training sessions are an important part of my work routine	3 (2.08)	11 (7.64)	11 (7.64)	69 (47.92)	50 (34.72)
I learn from my supervisor's experiences	3 (2.08)	14 (9.72)	12 (8.33)	72 (50.00)	43 (29.86)
It is important to schedule time for clinical training sessions	2 (1.39)	8 (5.56)	9 (6.25)	62 (43.06)	63 (43.75)
My instructor provides valuable advice for me	5 (3.47)	13 (9.03)	13 (9.03)	66 (45.83)	47 (32.64)
My instructor is easy going (comfortable) with me	1 (0.69)	20 (13.89)	19 (13.19)	69 (47.92)	35 (24.31)
Sessions with my instructor widen my clinical knowledge base	3 (2.08)	13 (9.03)	26 (18.06)	62 (43.06)	40 (27.78)
Clinical training is unnecessary for experienced students	18 (12.50)	26 (18.06)	10 (6.94)	47 (32.64)	43 (29.86)
My instructor skills makes him/her control the practice	3 (2.08)	25 (17.36)	22 (15.28)	53 (36.81)	41 (28.47)
Clinical training makes me a better practitioner	3 (2.08)	13 (9.03)	10 (6.94)	67 (46.53)	51 (35.42)
Clinical training sessions motivate staff of hospital	10 (6.94)	24 (16.67)	21 (14.58)	51 (35.42)	38 (26.39)
I can widen my skill base during my clinical training sessions	2 (1.39)	15 (10.42)	8 (5.56)	70 (48.61)	49 (34.03)
My instructor offers me guidance about patient/client care	6 (4.17)	8 (5.56)	10 (6.94)	80 (55.56)	40 (27.78)
I think receiving clinical training improves the quality of care I give	2 (1.39)	7 (4.86)	7 (4.86)	66 (45.83)	62 (43.06)

The study showed that the total clinical supervision score, trust/rapport, supervisor advice, support, improved care/skills, improvement/value of clinical supervision, funding time, personal issues, and reflection were significantly higher among medicine students compared to the nursing students (Table 3).

Comparisons of clinical training characteristics

The study showed that the medicine students were more likely to be satisfied with clinical training characteristics compared to the nursing students. The medicine students had longer clinical training compared to the nursing students: 19-24 months (44.64%) vs. 1-6 months (70.45%) ($p < 0.0001$), respectively. The entire clinical training of the medicine students was weekly compared to weekly (86.36%), every 2 weeks (3.41%), monthly (6.82%), and over 3 months (3.41%) among nursing students ($p = 0.0397$). The clinical training of the medicine students was completely performed within the workplace compared to nursing students within the workplace (82.95%), in and away from the workplace (11.36%), and away from the workplace (5.68%; $p = 0.0049$). The clinical training of all medicine students was performed for more than 60 minutes compared to nursing students for more than 60 min (72.73%), 31-60 min (15.91%), and < 30 min (11.6%) (Table 4).

Associated factors to the level of satisfaction among students

The study showed that the satisfaction rate was significantly increased with the duration of clinical training ($p = 0.0002$). The study did not find a statistically significant association of satisfaction rate with other clinical training characteristics (Table 5 and

Table 3. Level of clinical supervision between nursing and medicine colleges

Clinical supervision	Colleges		
	Medicine	Nursing	All students
Total CS score	80.31 (11.17)	60.81 (9.76)	68.34 (14.02)
Trust/rapport	19.07 (1.61)	15.02 (3.32)	16.59 (3.41)
Supervisor advice/support	12.94 (2.24)	10.83 (2.64)	11.64 (2.69)
Improve care/skills	3.222 (0.66)	2.535 (1.07)	2.8 (0.99)
Importance/value of CS	15.65 (2.99)	11.02 (2.78)	12.81 (3.64)
Funding time	10.3 (4.26)	7.802 (2.70)	8.764 (3.59)
Personal issues	9.037 (1.76)	6.814 (1.91)	7.671 (2.14)
Reflection	10.09 (1.44)	6.791 (2.10)	8.064 (2.47)

$P < 0.0001$ for all comparisons. An independent t -test was performed for statistical analyses.

Fig. 1). The longer duration of the clinical training program and clinical trainers of Medicine College were shown to increase the level of clinical training among students of the UoD (Table 6 and Fig. 2).

Table 4. Comparisons of clinical training characteristics between nursing and medicine colleges

Clinical training characteristics (n = 144)	Colleges		P-value (two-sided)
	Medicine (n = 56)	Nursing (n = 88)	
Level of satisfaction			
Moderately dissatisfied	9 (16.07)	33 (37.50)	< 0.0001
Very dissatisfied	0 (0.00)	6 (6.82)	
Neither satisfied nor dissatisfied	7 (12.50)	6 (6.82)	
Moderately satisfied	12 (21.43)	30 (34.09)	
Very satisfied	28 (50.00)	13 (14.77)	
Clinical training duration (months)			
1-6 months	0 (0.00)	62 (70.45)	< 0.0001
7-12 months	0 (0.00)	15 (17.05)	
13-18 months	31 (55.36)	10 (11.36)	
19-24 months	25 (44.64)	1 (1.14)	
Clinical training frequency			
Weekly	56 (100)	76 (86.36)	0.0397
Every 2 weeks	0 (0.00)	3 (3.41)	
Monthly	0 (0.00)	6 (6.82)	
Over 3 months apart	0 (0.00)	3 (3.41)	
Clinical training setting			
Within the workplace	56 (100)	73 (82.95)	0.0049
In and away from the workplace	0 (0.00)	10 (11.36)	
Away from the workplace	0 (0.00)	5 (5.68)	
Clinical training technique			
One-to-one	1 (1.79)	5 (5.68)	0.0922
Group	55 (98.21)	78 (88.64)	
Combination of one-to-one and group	0 (0.00)	5 (5.68)	
Clinical training duration			
Less than 30 minutes	0 (0.00)	10 (11.36)	0.0001
31 to 60 minutes	0 (0.00)	14 (15.91)	
More than 60 minutes	56 (100)	64 (72.73)	

Pearson's χ^2 test was performed for statistical analyses.

Table 5. Association of the level of satisfaction with clinical training characteristics among students

Clinical training characteristics (n = 144)	Satisfaction rate, n (%)			P-value (two-sided)
	Dissatisfied (n = 48)	Neutral (n = 13)	Satisfied (n = 83)	
Clinical training duration				
1-6 months	30 (48.39)	5 (8.06)	27 (43.55)	0.0002
7-12 months	6 (40.00)	1 (6.67)	8 (53.33)	
13-18 months	11 (26.83)	7 (17.07)	23 (56.10)	
19-24 months	1 (3.85)	0 (0.00)	25 (96.15)	
Clinical training frequency				
Weekly	41 (31.06)	13 (9.85)	78 (59.09)	0.5947
Every 2 weeks	2 (66.67)	0 (0.00)	1 (33.33)	
Monthly	3 (50.00)	0 (0.00)	3 (50.00)	
Over 3 months apart	2 (66.67)	0 (0.00)	1 (33.33)	
Clinical training setting				
Within the workplace	44 (34.11)	12 (9.30)	73 (56.59)	0.6994
In and away from the workplace	3 (30.00)	0 (0.00)	7 (70.00)	
Away from the workplac	1 (20.00)	1 (20.00)	3 (60.00)	
Clinical training technique				
One-to-one	3 (50.00)	1 (16.67)	2 (33.33)	0.6088
Group	43 (32.33)	11 (8.27)	79 (59.40)	
Combination of one-to-one and group	2 (40.00)	1 (20.00)	2 (40.00)	
Clinical training duration				
Less than 30 minutes	5 (50.00)	2 (20.00)	3 (30.00)	0.2414
31 to 60 minutes	6 (42.86)	0 (0.00)	8 (57.14)	
More than 60 minutes	37 (30.83)	11 (9.17)	72 (60.00)	

DISCUSSION

The study found that 57.64% of the students were satisfied with the clinical supervision, with a score of 68.34/88. The medicine students were more stratified compared to the nursing students. In addition, the nursing and medicine students had positive perceptions of clinical supervision in hospitals. The medicine students had longer clinical training, and their training was entirely weekly and was done within the workplace, compared to the nursing students. The study showed that the satisfaction rate significantly increased with the duration of clinical training. The longer duration of the clinical training program and clinical trainers of the Medicine College were shown to increase the level of clinical training among students of the UoD.

Clinical supervision has been conducted in developing and developed countries. Studies have reported different findings. The total score of clinical supervision is lower in this study than the scores reported in other countries, for example in developed countries: 129.11 in Portugal [13] and 138.7 in Denmark [14]. The developing countries have a lower score in clinical supervision, in agreement with our study – for example, 75.32 in Egypt and 120.42 in Iran [15]. We have not reported on the status of clinical supervision in Iraq yet.

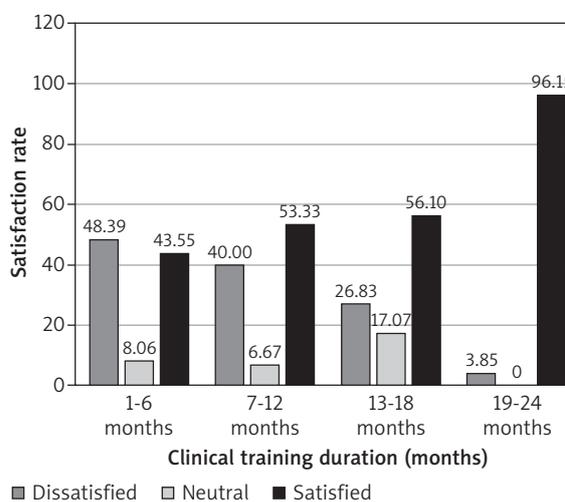


Figure 1. Association of satisfaction rate with duration of clinical training among students

The main issue in clinical supervision for nursing and medicine students is that the clinical training technique is mostly given in a group way. In this region, one-on-one training is less prevalent because there are not enough supervisors in clinical settings, or because the old guidelines of clinical practice are still used. In this study, more than 92% of the clinical

Table 6. Predictors of total level of clinical supervision among nursing and medicine students

Controlling factors (n = 144)	Outcome: total level of clinical supervision	P-value
Clinical training duration (months)		0.00000
College		0.00242
Clinical training setting		0.60686
Clinical training duration		0.61146
Clinical training frequency		0.84211
Clinical training technique		0.97142

Standard least square with effect leverage was performed for statistical analysis.

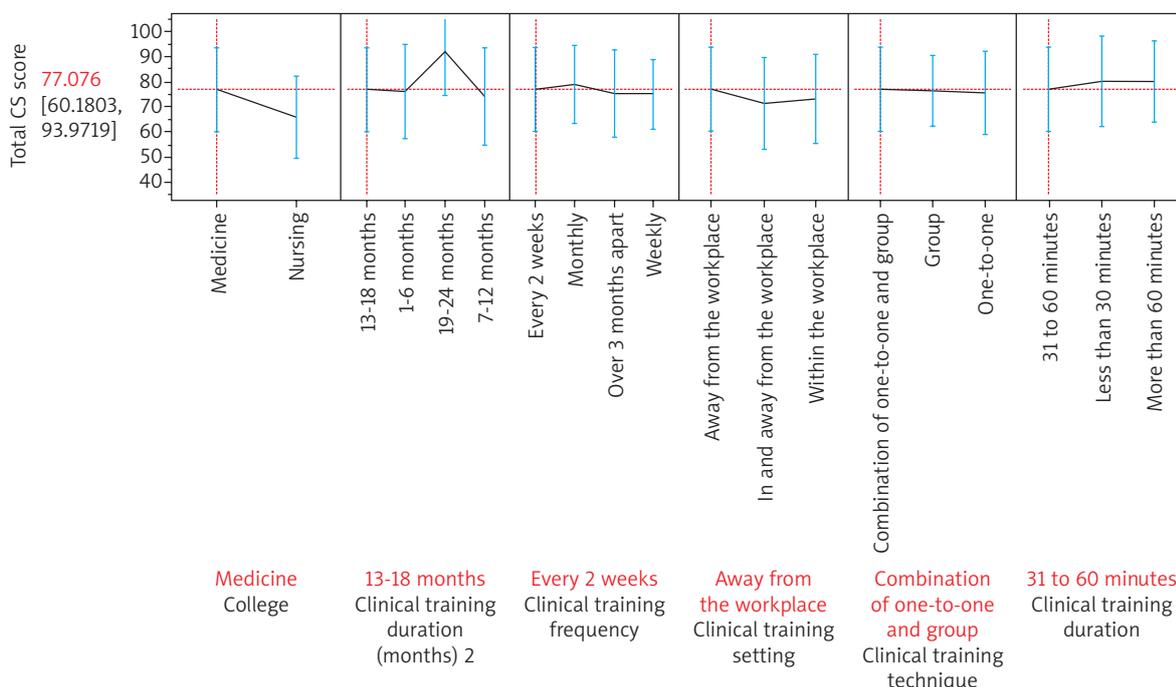


Figure 2. Predictors of total level of clinical supervision among nursing and medicine students

training was done via a group technique. The group technique may not provide sufficient time for each student to practice the clinical activities. Therefore, according to a study conducted by Meo [16], small-group teaching encourages learners to actively participate, improves teamwork ability, helps learners retain more information, increases their interest, and improves their critical thinking and self-directed learning skills. The group training technique may motivate the students for clinical activities. Medicine students have a longer training duration compared to nursing students. Frankly, this longer duration is obtained because the medicine students have 6 years until graduation from medical college. This period gives a golden opportunity for the students to practice different aspects of medicine, because they start the clinical training from the fourth stage. However, the nursing students do not have full clinical train-

ing each year. They practice the clinical sessions as part of their subjects weekly. Hence, this short period does not allow the nursing students to practice the clinical activities through a group training technique. We suggest that the entire fourth year be devoted to clinical training at the nursing college.

The students in the clinical setting require support and guidance from the instructors or tutors to increase their confidence and motivation, and to perform their clinical duties properly. The clinical supervisors should provide opportunities for clinical practices to the students and assess the patients' statuses. In this regard, the clinical instructors need time to answer the students' questions, provide advice and guidance, and give friendly support to the students supervision under different conditions [17]. However, the students' interest and motivation for the clinical training are effective in clinical education

[18]. In the case of giving a short period of clinical supervision, the students did not have opportunities to observe sufficient case studies and earn their clinical skills [19]. This is why the nursing students were less likely to be satisfied with the clinical supervision and had lower scores in the clinical supervision. Insufficient time by clinical instructors, roaming in the wards, and wasting time were reported as causes of dissatisfaction [20]. Enhanced supervision was shown to result in improved patient- or education-related outcomes [21]. A study investigated what helps and what hinders clinical supervision. The most frequently cited positive themes reported by the study were (1) personal attributes of the clinical supervisor, (2) clinical supervision competencies, (3) mentoring, (4) relationships, and (5) multicultural supervision competencies. The negative themes were reported as follows: (1) personal difficulties, (2) negative personal attributes, (3) lack of a safe and trusting relationship, (4) lack of multicultural supervision competencies, and (5) lack of competencies [22].

In this study, the funding time was significantly higher among students who had a longer duration of clinical training (data not shown). This shows that the longer duration of clinical training provides more opportunities for the students regarding patient healthcare. The barriers to clinical supervision reported in a review study were lack of time, space, and trust, lack of shared understanding of the supervision's purpose, and lack of continuous support and engagement from leadership and organizations [23].

Staff shortage in hospitals is one of the main factors for not applying the one-to-one training technique in this region. This region has a shortage of nursing staff in hospitals. The compensation of staff shortage and proving personal standard levels could establish the bases for the training of the nurses and doctors for appropriate human resource management and increase the effectiveness of hospital activities [24]. Also, the crisis may affect the status of clinical training of students [25], but this study was performed before the COVID-19 crisis. The time pressures form clinical workload, perceived lack of organizational support, and lack of guidance on expectations have been reported as challenges in the literature [26].

The following strategies to improve clinical supervision have been reported in the literature; providing opportunities for students to select their clinical supervisor and introduce peer group supervision for experienced clinicians, and implementation of an organizational clinical supervision framework for some professionals. However, there is a need to develop common, structured frameworks to support quality clinical supervision [27].

Limitations of the study

The main weakness of this study is that we could not include the students through a random technique. Therefore, it may not be representative of all medicine and nursing students at the University of Duhok.

Future studies

We suggest the issues of clinical supervision be examined in more detail through some qualitative studies. The quantitative studies may not uncover the real problems of clinical supervision of medical students.

CONCLUSIONS

This study showed that the overall score of clinical supervision of nursing and medicine students is acceptable. However, the medicine students are more likely to be satisfied with the clinical supervision compared to the nursing students associated with duration of training.

Disclosure

The authors declare no conflict of interest.

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