Background
Clinical learning is a key area that explicates the importance of a nursing student’s performance in the clinical setting, and provides the students an avenue to practice their skills, develop their professional identity, increase their knowledge, and apply the theoretical and practical knowledge in the clinical setting [1,2], and hence, the readiness among new graduate nurses in assuming professional practice must be critically attended, especially with the increasing demands of competent nurses in the healthcare sectors. The gap between nursing theory and practice is broadly documented and discussed in the literature [3-5], that can be defined as the inconsistency between what student nurses acquire through theoretical classroom lectures and what they experience in the clinical setting [6]. Despite considerable efforts by the profession, growing inconsistency between nursing theory and nursing practice has been a source of concern, to educators, practitioners and students, by numerous of studies [7,8]. It is quite evident that the gap does exist and has its strengths as the area can be improved [8]. Clinical learning environment (CLE) is demonstrated as a valuable component of a nursing program, that provides students with unique learning opportunities in which classroom theory and skills are put to the test with real life situations.

Material and Method: A descriptive quantitative cross-sectional design was conducted in this study throughout a period of three consecutive months from 1st June, 2017 to the end of August 2017. Subjects were selected conveniently from the available students at the 5 main governmental hospitals of Gaza strip.

Results: The findings showed the greater part of students (56.3%) were enrolled in the senior level of the study. There was a significant agreement (Mean 3.5, t = 8.1) among student nurses about the role of availability of setting in reducing the theory-practice gap, that the process of orientation to the place of training could contribute to bridge the gap was captured the highest mean score (mean= 3.9, 78%). On the other hand, the study shows significant borderline agreement (3.4, 68%) about the availability of simulation labs at the colleges of nursing could contribute to bridge the gap, which might truly reflect the current lower availability of simulation in some nursing colleges of Gaza strip.

Conclusion: There is quite evident that gap’s phenomenon does exist and has its strengths as well as areas that can be improved by harmonizing the theoretical nursing approach with clinical practice approach and give opportunities for both clinical instructors and students to work within a more creative clinical environment.

Keywords: Bridging the Gap; Theory; Practice; Nursing Education

Abbreviations : BSN: Palestine College of Nursing; CLE: Clinical learning environment; HRD: Human Resources Development; SPSS: Statistical Package for Social Sciences
from the classroom into their clinical practice by accomplishing an ideal learning environment in hospitals of the Gaza strip. In Palestine, up to the researchers’ knowledge, there was no previous published studies that articulate this phenomenon, and therefore, this study aims to explore the assess the issue of the gap between theory and practice in perspective of student nurses within the context of readiness of clinical setting for coaching of nurses’ students in order to provide nursing students with the opportunity to link theory to practice, and become familiar with the practice environment.

**Material and Methods**

**Study Design**

A descriptive quantitative cross-sectional design was conducted in this study to identify the knowledge practice gap as perceived by the student nurses. This design is appropriate for describing the status of phenomena or for describing relationships among phenomena and involves the collection of data once the phenomena under study are captured during a single period of data collection [12].

**Setting and Period**

The study was conducted throughout a period of three consecutive months; from 1st June, 2017 to the end of August, 2017. Subjects were selected conveniently during the study period from the available student nurses at the 4 main governmental hospitals of Gaza strip; namely El-Shifa complex, European Gaza hospital, Naser Medical Complex and Al-Aqsa hospital.

**Study Participants**

Eligible subjects were nurse students who were available at the target hospitals during data collection period; and were enrolled in BSN program at junior or senior levels of study; 3rd or 4th level respectively. All eligible student nurses involved in the target hospitals at the time of data gathering were invited to participate in the study. The response rate was very high (96.4%) since that among total 140 available student nurses, data were obtained from 135 students who consented to participate in the study.

**Data Collection Tools**

Data on students’ demographic characteristics were gathered via a self-administered questionnaire in Arabic version. A self-constructed questionnaire with close-end questions was developed after extensive literature review which went through content and face validity. The questionnaire covered the variables about readiness of clinical setting in governmental hospitals for coaching of nurses’ students.

**Ethical Considerations**

The study protocol was approved by the Palestinian Ministry of Health represented by Human Resources Development (HRD) and the authorized ethical body represented by Helsinki Committee in Gaza Strip. Confidentiality was ensured during and after questionnaire filling and a written consent form, including an inform letter, was signed by all participants.

**Data Processing and Statistical Analysis**

Data were entered, edited and analyzed using the Statistical Package for Social Sciences (SPSS) software version 22 [13]. Frequency and percentage was used in order to describe sociodemographic characteristics of the students. Furthermore, mean, t test and f test were used to measure the perception of students regarding 22 items. All P- values were one-tailed and considered significant when less than 0.05.

**Results**

**Description of the Study Population**

The sociodemographic characteristics of the 135 participants are illustrated in Table 1. Among the participating nurses, the greater part (57.8%) was females, and males were 43.2%. The mean age of the study population was show high homogeneity (22.32±2.65) as they were selected from homogeneous target population. More than half of students (56.3%) were enrolled in the senior level of the study (4th level). The students who participated were mainly from medical department (37%), followed by surgical (23.7%), emergency (17.8%), pediatric (10.4%), ICU (5.9%) and obstetric (5.2%). The vast of study sample (55.6%) was drawn from El-Shifa Medical Complex as considers the main hospital in Gaza strip.

| Variables | Category          | Frequency "n" | Percentage % |
|-----------|-------------------|---------------|--------------|
| Gender    | Male              | 78            | 57.8         |
|           | Female            | 57            | 42.2         |
|           | Total             | 135           | 100          |
| Age       | Mean ± SD         | 22.32±2.65    |              |
| Student’s level | Third            | 59            | 43.7         |
|           | Fourth            | 76            | 56.3         |
|           | Total             | 135           | 100          |
| Department | Medical           | 50            | 37           |
|           | Surgical          | 32            | 23.7         |
|           | Obstetric         | 7             | 5.2          |
|           | Pediatric         | 14            | 10.4         |
|           | ICU               | 8             | 5.9          |
|           | Emergency         | 24            | 17.8         |
|           | Total             | 135           | 100          |
| Hospital  | El-Shifa complex  | 75            | 55.6         |
|           | European Gaza hospital | 31      | 23.0         |
|           | Al-Aqsa hospital  | 15            | 11.1         |
|           | Naser medical complex | 14         | 10.3%        |
|           | Total             | 135           | 100          |
Clinical Environment-Related Factors

A five-rated Likert’s scale questionnaire was used in measuring the presented gap between theory and practice. The results of Table 2 exhibited, there was a significant agreement (mean = 3.5, 70%) among student nurses about the role of readiness of clinical environment for bridging the gap between theory and practice. Of which, the participants declare that the process of orientation to the place of training could contribute to bridge the gap; that was captured the highest mean score (mean= 3.9, 78%). This result support the importance of students’ orientation to the clinical setting before starting coaching of students in order to bridging the theory-practice gap. Furthermore, a high level of agreement was shown in the following items: availability of equipment (72%), presented number of students in training group (70%), and presented work policies at the place of clinical training (70%). On the other hand, the study shows significant borderline agreement (3.4, 68%) about the availability of simulation labs at the colleges of nursing could contribute to bridge the gap, which might truly reflect the current lower availability of simulation in some nursing colleges of Gaza strip. The same as the results shows a borderline students’ agreement towards appropriateness of clinical setting for bridging the gap, which is might truly reflect the current shortages in some drugs, facilities and equipment as a result from siege of Gaza strip. Supporting to this result, the students also shows insignificant low mean agreements (mean=3, 60%) about the availability of manual nursing procedures for students and instructor at the clinical training site; that might be an indicator for inexistence of manual procedures or an inactivation of such procedure at some clinical setting in the selected target studied hospitals.

Table 2: Mean score of clinical setting domain.

| Items                                                      | Mean | SD   | %   | t    | P-value |
|------------------------------------------------------------|------|------|-----|------|---------|
| The process of orientation to the place of training contribute to bridge the gap | 3.9  | 1.00 | 78.0| 10.4 | <0.001  |
| The available equipment and medical supplies in the place of clinical training contribute to bridge the gap | 3.6  | 1.10 | 72.0| 6.6  | <0.001  |
| The presented number of students in your training groups contribute in bridging the gap | 3.5  | 1.20 | 70.0| 5.3  | <0.001  |
| The presented work policies at the place of clinical training contribute to bridge the gap | 3.5  | 1.10 | 70.0| 5.7  | <0.001  |
| The available simulation labs at the College of Nursing contribute to bridge the gap | 3.4  | 1.20 | 68.0| 4.2  | <0.001  |
| There is an appropriate training environment that help to bridge the gap | 3.4  | 1.20 | 68.0| 3.6  | <0.001  |
| The manual nursing procedures is available for students and instructor at the clinical training site | 3.0  | 1.20 | 60.0| 0.3  | 0.730   |
| Mean score of setting                                      | 3.5  | 0.7  | 70.0| 8.1  | <0.001  |

* The mean score (3.40) is statistically significant at p <0.05, and relative weight > 60%.

Inferential Statistics

The results of Table 3 exhibited there was a statistically significant difference (F=5.63, & P=0.001) between colleges of nursing and demonstration of gap in clinical setting; that nursing students belong to university college and Al-Azhar university were reported the highest mean scores for gap (3.7±0.6, and 3.7±0.7 respectively), whereas nursing students belong to Islamic university and Palestine college of nursing were quite less reporting the presence of gap (3.4±0.6, and 3.2±0.8 respectively). Moreover, junior students’ level, third year, were showed a higher mean score of gap’s confirmation than senior students level, fourth year; (3.6±0.6 vs 3.4±0.7). Despite of minor difference, it was remained a statistically significant value (T=2.24 & P=0.027). On other hand, there is no significant statistical difference between mean score of reporting the presence of gap in clinical setting with regard to the gender of students, which it is truly reflect that all nursing students, regardless of their gender, exposed to the same clinical setting of practice. The same as, an insignificant difference was observed between hospital’s name, and the students’ demonstration of gap in the clinical setting. This result is obviously reflecting that all settings of clinical nursing practices in Gaza strip were belong to the governmental hospitals, which having the same facilities and standards of work. As far as, the departments of practice is concerned, there was a minor significant difference (F=2.32 & P=0.047) between students’ responses toward presence of gap in relation to different department of practice, since the surgical, medical and emergency departments were captured the highest mean scores (3.6±0.6, 3.6±0.6 & 3.5±0.9 respectively), whereas pediatric and obstetric departments nursing students were quite less mean scores (3.6±0.4, 3.4±0.6 & 3.1±0.7 respectively). This result is could reflect that hot areas of clinical practices (ICU and emergency) having less gap than other wards.
Table 3: Association between sociodemographic characteristics of subjects and clinical setting.

| Item                          | N=135 | Mean ±SD       | F     | T      | P-value |
|-------------------------------|-------|----------------|-------|--------|---------|
| College                       |       |                |       |        |         |
| Palestine college of nursing  | 34    | 3.4±0.6        |       | 5.635  | *0.001  |
| Islamic university            | 40    | 3.2±0.8        |       |        |         |
| University of college         | 27    | *3.7±0.6       |       |        |         |
| Al-Azhar university           | 34    | *3.7±0.7       |       |        |         |
| Student's level               |       |                |       |        |         |
| Third level                   | 59    | *3.6±0.6       | 2.242 | *0.027 |         |
| Fourth level                  | 76    | 3.4±0.7        |       |        |         |
| Gender                        |       |                |       |        |         |
| Male                          | 78    | 3.4±0.6        |       | -1.839 | 0.068   |
| Female                        | 57    | 3.6±0.8        |       |        |         |
| Hospital                      |       |                |       |        |         |
| El-Shifa complex              | 75    | 3.5±0.7        |       | 1.52   | 0.18    |
| Al-Aqsa hospital              | 15    | 3.1±1.1        |       |        |         |
| Naser medical complex         | 14    | 3.5±0.2        |       |        |         |
| European Gaza hospital        | 31    | 3.6±0.6        |       |        |         |
| Department                    |       |                |       |        |         |
| Medical                       | 50    | *3.6±0.6       | 2.321 | *0.047 |         |
| Surgical                      | 32    | *3.6±0.6       |       |        |         |
| Emergency                     | 24    | *3.5±0.9       |       |        |         |
| ICU                           | 8     | 3.4±0.6        |       |        |         |
| Pediatric                     | 14    | 3.3±0.7        |       |        |         |
| Obstetric                     | 7     | 2.8±1.1        |       |        |         |

* The mean score (> 3.40) is statistically significant at p <0.05.

Discussion

Nurses are confronted to provide equitable, effective, affordable, and high-quality health care services. Many researchers have found that gap between theory and practice in nursing does exist [2-4], as well as the area that can be improved [8]. The results of the study revealed that there is a gap between theory and practice in nursing education, which were related to clinical setting. The studies of of [14] and [8] support that educators of nursing theory must constantly monitor clinical practice and reevaluate the curriculum to ensure that necessary knowledge and skills for successful practice are achieved from the educational program. Additionally, the study of [9] illustrates, that supportive clinical training environment is most influential in the development of nursing skills, knowledge, and professional socialization by enhance students learning by creating a positive learning environment and participating as role models. The same as [15] supports that the clinical practice as an area that allows students to have direct experience with the real world of nursing, practice the clinical skills required for the job and learn the general nursing routines and responsibilities. On other hand [16] states that simulation will be especially useful in preparing student nurses for clinical work. In this study, most of participants show that the process of orientation to the place of training, available simulation labs, number of students in training groups and presence of work policies at the place of clinical training will positively contribute to bridge the gap and thus enhance clinical learning environment, helping in reducing the gap. Additionally, the finding of this study is consistent with that of [9] who found that the sufficient equipment and personnel within the clinical facilities will enable clinical teaching and learning to take place.

Conclusion

It is obvious that all themes mentioned by the students play an imperative role in student learning process and could greatly reflect the current theory-practice gap in nursing education. The study reflects that clinical instructors make a valuable contribution to the students learning process that may enhance students learning by creating a positive learning environment.
and participating as role. There were some similarities between the results of this study with other previous literature, that some of the factors related to gap are universal in global nursing education, while other factors still locally affecting the theory-practice gap in nursing education at nursing faculties of Gaza strip. In the light of our study results, there is quite evident that gap's phenomenon does exist and has its strengths as well as areas that can be improved. There are strategies available to overcome this issue, which focus on facilitate an optimal clinical setting and having a liaison between the education and the practice areas. However, this investigation has shown that the students in this study considered optimization of clinical setting were essential components of their learning process. From this perspective, the nursing colleges must be harmonizing the theoretical nursing approach with clinical practice approach and give opportunities for both clinical instructors and students to work within a more creative clinical environment that will promote and add to the professional knowledge base of nurse education.

**Recommendations**

It is recommended that further interviews with clinical instructors, nursing lectures and nursing matrons on how to close the gap between the theory and the clinical components of nursing education. On other hand, nursing colleges in the Gaza strip are recommended to provide their clinical labs with simulation equipment which could positively contribute in bridging the theory-clinical gap. Similarly, nurses’ managers and matrons of nurses should ensure that there is sufficient equipment and personnel within the clinical facilities to enable clinical teaching and learning to take place, and also to keep manual nursing procedures available on hands of clinical instructors and their students at the clinical training site. Lastly, further qualitative in-depth studies are recommended in order to explore the experience of clinical instructors, identify the perception of educators regarding clinical nursing education, and analyses the readiness of governmental hospitals for clinical training of nursing students.

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