

Senior Nursing Students' Perception of the Theoretical knowledge and Clinical Practice Gap in an in-hospital Nursing Program – A Descriptive Study conducted in Southern Saudi Arabia

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Abstract: In-Hospital Nursing training programs in Saudi Arabia are gradually being phased out, yet these nursing programs can help to reduce the gap between theoretical knowledge and practical training in nursing. Thus, this study aimed to explore senior internship nursing students' perception of the gap between theoretical knowledge and clinical practice, specifically pertaining to its existence, the reasons for it and its effect on their nursing performance. A descriptive-explorative study was conducted among the 35 senior internship nursing students in an in-hospital Nursing program, affiliated to one of the tertiary hospitals in the southern region of Saudi Arabia. A self-administered questionnaire was used, comprising four main sections, namely areas where the theory-practice gap exists; reasons for the gap in clinical practice; reasons for the gap in theoretical knowledge; and finally, the impact of the gap on the students' performance. Overall it was found that around 83% of the students experienced a gap between theory and practice. The reasons for the gap was perceived as theoretical knowledge that is not applicable to practice; the teaching strategy that was not well integrated into the training practice; and the sequence of the subjects at the nursing school that was not matching the practical training. About two thirds of the students expressed that adaptation to the hospital environment was one of their major concerns. It was found that the gap between theoretical knowledge and practical training could be reduced in an In-Hospital Training program by promoting more coordination between the nursing school and the hospital administration, along with improving teaching strategies.

Keywords: In-hospital nursing program, the Theory-Practice gap, Internship nursing students, Southern region of Saudi Arabia.

I. INTRODUCTION

The Theory-practice gap is one of the major existing challenges in nursing education and nursing practice [1], [2], [3], [4], [5], [6]. Despite all the measures to reduce this gap, there is a persistent discrepancy between what nurses learn at the nursing schools and the subsequent practical application in the hospitals or clinical placement areas [7]. In his research, Mc Caugherty [8] found that the theory-practice gap can be difficult to avoid because text books do not provide students with a clear picture of what real disease manifestations in patients look like, compared to real-life nursing management. However, this gap could be limited to a certain degree.

Several studies found that senior nursing students and newly graduated nurses perceive the theory-practice gap as real [4], [9], [10], [11], citing reasons such as "lack of learning and educational supports; lack of learning opportunities; low combination of theory and practice; and an inadequate relationship between students, faculty instructors, and hospital

personnel” as factors leading to negative clinical training experiences by students [10]. Ha and Choi [12] also identified clinical placements in unfamiliar settings, limited knowledge and a lack of confidence in the clinical training and practice learned at the nursing school, as other sources of the theory-practice gap as perceived by nursing students. McCaugherty [8] found that nursing students identified the reasons for the theory-practice gap as being the nursing curriculum, the nursing course content, and sequence of study. In addition, teaching methods such as problem-based teaching, learning of theory and practical learning were highlighted by Bruhn [13] and Davhana-Maselesele [14] as elements involved in overcoming the theory-practice gap.

Furthermore, the theory-practice gap can affect students in various areas of work; previous studies found that a lack of adaptation to the clinical setting, low self-esteem and self-image, stress and anxiety about mistakes, conflict with other nurses and patient complaints were all mentioned by participants as contributing factors [15], [16], [17], [18], [19], [11], [16].

The first Nightingale model of nursing education was in-hospital training in the form of diploma schools that were affiliated to a hospital; students were employed in the hospital soon after graduation in order to address the nursing shortage and also to increase the nursing workforce. This made nurses more involved in clinical practice and fulfilling the nursing practice role without the necessary critical thinking skills based on solid nursing knowledge and information that could be gained from formal nursing education and study. On the other hand, when nursing education took a place at formal universities, nurses received more theoretical knowledge rather than practical knowledge, which in its turn created the existing theoretical knowledge -clinical practice gap [20], [7], [14]. Among the advantages mentioned in the in-hospital nursing programs were direct access to doctors and best practice research, immediate availability of clinical rotations during their studies and direct employment after graduation [21].

However, studies that have explored the perceived theory-practice gap in an in-hospital training program are limited.

II. BACKGROUND INFORMATION

This study was conducted at one of the diploma nursing programs (three and-a-half year course) that is managed under a tertiary hospital. The nursing school has teaching and learning strategies independent from the hospital and follows an international nursing curriculum; the nursing lecturers were not working in the hospital as clinicians. During the study years, the students were demonstrating their practical training at both the nursing school high fidelity skills labs as well as in the affiliated hospital areas training. All the practical training was conducted at the affiliated hospital under direct supervision of the nursing school; hospital preceptors and nursing staff were only facilitating the clinical training. The graduates were hired in the hospital soon after passing the Saudi Council Nursing Exam and acquiring a National Nursing License. During the last 6 months of the study, the students complete the internship period at the hospital in different areas under the direct supervision of the hospital clinical preceptors. This aimed at helping the students to integrate with the hospital system where they will eventually be employed.

The aim of this study was to explore the senior internship-nursing students’ perception of the theoretical knowledge and clinical practice gap; its existence; the reasons and the effects of the gap in an In-Hospital Nursing Education Program.

III. METHODOLOGY

A. Study Design:

An explorative-descriptive design was used in this study, conducted in December 2015, in order to explore the 35 nursing internship students’ perception of the theory-practice gap at the clinical placement (hospital) and the effect of that gap on their performance. The students were working independently away from direct nursing school supervision and were supervised by the hospital clinical preceptors and the clinical areas nursing supervisors.

B. Study Tool:

A self-administered questionnaire was drawn up and was divided into four main sections: areas of theory-practice gap; reasons for the gap in the clinical practice; reasons for the gap in the theoretical knowledge and the impact of the gap on the student’s performance. The questionnaire was pre-tested with five students that were not included in the analysis; some wording and questions were adapted to meet the cultural understanding based on the pilot survey results. Each question required answers to be rated from strongly agree, agree, disagree, to strongly disagree. The questionnaire included clear definitions of: theoretical knowledge, practical training and the gaps in between. From the pilot testing it was clear that the students comprehended the meaning of the major terminology used in the study.

C. Setting:

The nursing institution is connected to a tertiary hospital where the students took all the nursing courses and clinical training during their study period. Students’ clinical training was supervised by the nursing school and each group of students (maximum of 5) had one clinical instructor to follow their training separately from the hospital staff. During the internship period, the students’ practical rotation included all the different hospital areas and it was supervised by the hospital clinical preceptors and the hospital staff. The study was distributed among the internship students towards the end of their internship period.

D. Statistical Analysis:

PASW Statistical 18 software was used for the analysis; descriptive and frequency analyses were run.

IV. RESULTS

The majority of students were between the ages of 21 and 22 years old and 90% of them were single. Almost all students enrolled in the nursing program in the same academic year and followed the same nursing curriculum. Around 83% of the students indicated that there was a gap between the theory and practice when they started their internship period. Figure one shows that the gap was highly recognized in each of the administering policies and procedures and in applying the nursing knowledge (71.4% in each), followed by operating medical devices and demonstrating nursing skills (62.9% ,60% respectively). The lowest score was found in the process of administering medication (57.1%).

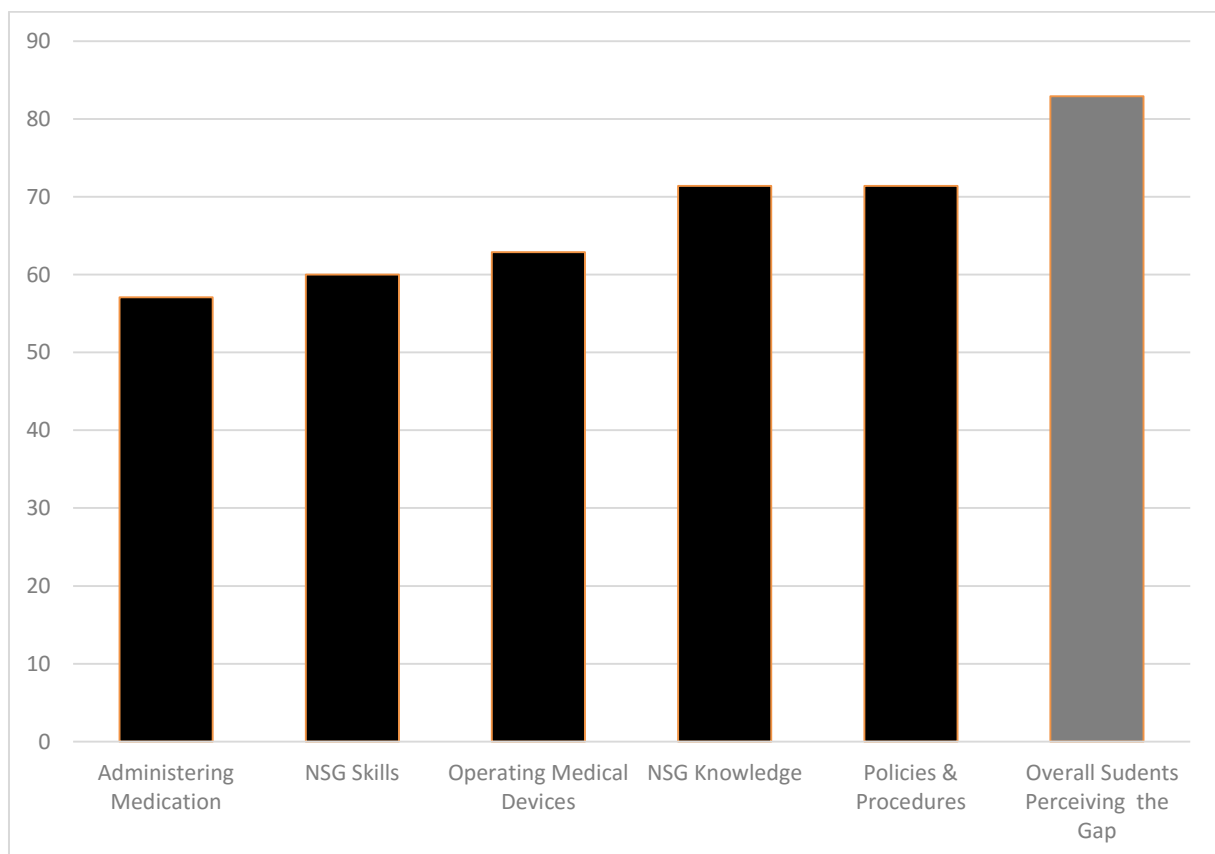


Fig 1. Students’ perception of the major areas where a gap exists between theoretical teaching and practical application

Figure N shows the students’ perceived reasons for the gap in the theoretical knowledge; around 74% perceived that the theoretical knowledge was not entirely applicable to the practice in the hospital. Around 63% thought that the teaching strategy for the theoretical knowledge was not well integrated to the practice in the hospital. Moreover, 60% thought that the sequence of teaching the nursing subjects at the nursing institution was not matching the sequence of the training in the hospital. About half of the students thought that the theoretical knowledge content in terms of lectures might not be given in harmony with the needed practical skills.

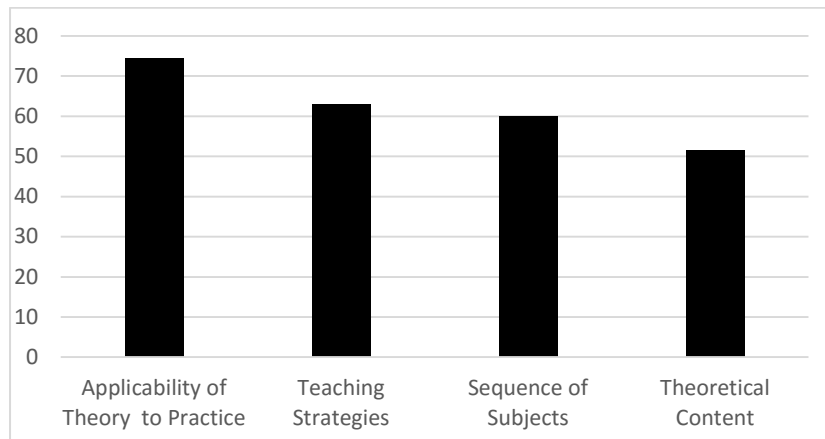


Fig. 2: Students' perception of the reasons for the theory-practice gap (Theoretical Learning Related Questions)

Table 1 (below) shows the perceived reasons for the existing gap in terms of the clinical training, in that close to half of the students recognized that the reasons were to be found in both the nursing school skills lab training and the clinical placement areas training. However, about 54 % of the students recognized that the clinical placement areas are following the theoretical international standards, and close to two third of the students recognized that the clinical placement areas are following the international clinical practice in nursing.

TABLE I. STUDENTS' PERCEPTION OF THE REASONS BEHIND THE GAP BETWEEN THEORETICAL TEACHING AND CLINICAL PRACTICE (CLINICAL TRAINING RELATED QUESTIONS)

The Reasons mentioned	%
Problems with the training in the nursing school skills lab	62.9
Problems related to the clinical placement areas	65.7
Students who perceived problems in both the skills lab and the clinical placement areas	48.6
The clinical placement areas reflect the theoretical nursing standards	54.3
The clinical placement areas reflect the clinical nursing standards	71.4

Table II (below) illustrates the major effects of the gap between theory and practice according to the students. As many as two third of the students expressed that adaptation to the hospital environment was among their major concerns; in addition to feelings of low self-esteem while practicing in the hospital; as well as decreased nursing staff confidence in the students' abilities and capabilities, which would lead to an increase in conflict with the nursing staff (68.6% each). Sixty percent of the students expressed that the patients themselves might complain when they feel that there is a difference between a hospital nurse's clinical practice and the student's performance. The least effect recognized by the students was decreasing their self-confidence (54.3%).

TABLE.II: THE EFFECT OF THE GAP BETWEEN THEORETICAL TEACHING AND PRACTICAL TRAINING AS PERCEIVED BY THE STUDENTS

Effect	Strongly agree	Agree	Disagree	Strongly disagree	mean
Adaptation to Hospital Requirements	14.3	60.0	22.9	2.9	2.17
Professional Status	11.4	42.9	40.0	5.7	2.40
Low Confidence in students' performance	11.4	54.4	31.4	2.9	2.09
Low Confidence in students' knowledge	20.0	48.6	28.6	2.9	2.14
Conflict with Staff	25.7	42.9	28.6	2.9	2.09
Patient Complaints	14.3	45.7	31.4	8.6	2.34

V. DISCUSSION

Although the program was an In-Hospital Program and the students were familiar with the hospital setting, the procedures, policies and the nursing staff of the hospital, the majority of the students perceived the gap between theoretical knowledge learned in the nursing school and the practical applications at the hospital. The students' perceiving the gap was found in several studies before [22], [23], [24].

The majority of students recognized the existing gap in the areas of applying the hospital policies and in applying nursing knowledge, and the least were in applying nursing skills and in medication administration. This can be due to the practical training strategy in the nursing school as, although the students were conducting the training in the affiliated hospital, the students were working separately from the hospital staff during their clinical training period. This is because they were supervised and managed by the nursing school clinical instructors in applying all the theoretical knowledge learned at school, which might have led to less accompaniment (accompaniment means guided support for the student to help them grow from a passive learner into an active participant in order to become a critical thinker, and independent and effective practitioner) [25]. The fact that the students were accompanied by their tutor might have given them a feeling of dependency and caused less involvement in the hospital policy and procedures. This was also found by Davhana-Maselesele et al [14].

The fact that the students worked independently and under the supervision of the nursing preceptors and nursing staff, led the students to perceive some differences in administering nursing skills and medication. This would be related to differences among hospital nurses' academic background or other nursing issues like time pressure and work overload which probably caused them not to follow the standards of nursing learned in the nursing school, as found by Maben et al [26]. However, the theory –practice gap in both medication administration and administering nursing skills might affect patient safety and provide incompetent nursing skills [27] and [28].

Theoretical knowledge teaching and learning were found by the students to not correlate with the clinical practice; neither the sequences of the courses nor the teaching content applicability. When we asked the students how they recognized this more during their internship period, some of them replied that, due to the above mentioned reasons, some of the training and practice were not well-covered during their study and they found a gap when they practiced independently. This was discussed in several previous studies as there must be a need for curriculum reform and improvement in the teaching strategy to match the practical aspects [24], [10] and [29].

Almost half of the students thought that the reasons behind the theory-practice gap might be in applying the practical training at both the hospital placement areas and in the skills lab at the school of nursing. This could be due to the time allocated to skills lab training and the hospital rotations, as more time should be given to each course in training for both hospital and skills lab training [30] and [31].

Similar to many previous studies [10], [12] and [22] the students mentioned that the effect of the theory-practice gap had mostly to do with their adaptation to the hospital environment, low self-esteem, increased conflict with the nursing staff and patient complaints. These factors could be interlinked, as a lack of adaptation might decrease nursing staff confidence in the students' capabilities and that in its turn would lead to the feeling of low self- esteem. All of this could then lead to increasing conflicts with the nursing staff and finally the patient complaints might increase due to the students' performance.

VI. CONCLUSION & RECOMMENDATIONS

It is evident that the theory- practice gap exists and is identified by students even in an in-hospital nursing program. However, it might be much easier to bridge the gap when the nursing school is fully affiliated to one tertiary hospital where the students will be hired after graduation. An In-Hospital Training Program can be effective in reducing the theory-practice gap in nursing education. However, better coordination is needed between the hospital nursing management and the nursing school, as well as the hospital nursing preceptors [22] during the practical training [24]. In addition, better communication between the staff and nursing students is required. Furthermore, there is a need for standardizing all the procedures among the nurses, regardless of their educational background. Furthermore, the nursing curriculum and time allocation need to be reviewed and updated in order to fill the gap. Further study is recommended for in-hospital nursing programs and decreasing the gap between theoretical knowledge and practical training in nursing.

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