ORIGINAL ARTICLE

Strengths, weaknesses, opportunities and threats analysis of maternity nursing courses: Students' voices

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ABSTRACT

Background: The analysis of strengths, weaknesses, opportunities, and threats "SWOT," has long been used to evaluate the objective(s) of a specific pedagogical program.

Aim: Conduct a SWOT analysis of two distinct maternity courses by gathering data from nursing students from two Faculties of Nursing in central Egypt.

Methods: A comparative analytic design involving third-year students was carried out in (A) and (F) Faculties of Nursing during the academic year 2015/2016.

Results: The response rate of students was more than eighty percent from (F) Faculty of Nursing and greater than fifty percent of students from (A) Faculty of Nursing. A statistical significant difference found in course objectives; innovation methods of teaching; and the adequacy of the learning environment between participants.

Conclusion: The study identified the gaps for achieving the objectives of maternity courses in both Faculties. Recommendations: Utilization of positive points garnered from the investigation and addressing negative findings in both courses.

Key Words: *Strengths; Weaknesses; Opportunities; Threats; Maternity course*

INTRODUCTION

Nursing and midwifery courses in Egypt are manifested in two parts, involving theoretical and clinical content. Each part has specific features that advance students' knowledge and clinical skills. The theoretical education leads to expansion and improvement of students' knowledge base regarding a specific health care topic, and the clinical courses lead to application of that theoretical knowledge in a clinical setting (1). With regards to maternity care, theoretical courses introduce the study of the reproductive system, and maternal and child health nursing related to that system. The theoretical course content generally addresses care of mother and baby from conception to postpartum as well as discharge and home care. The clinical course provides students practical experiences to apply fundamental principles and skills necessary to provide health care for pregnant women and newborns. This experience builds upon previous general skills using the nursing process. The student provides care to one to two clients in non-complex health care situations that occur in labor and delivery suites, newborn nurseries, and postpartum care locations. Consequently, this approach enriches the students with an effective theoretical and practical nursing education towards optimizing the quality of health care for women and neonates (2).

It is important for educators in any School ("Faculty") of nursing to routinely analyze the effectiveness of ongoing courses as a measure of their ability to expand students' knowledge of a particular subject. A traditional method for this analytic quality control is the use of the "SWOT" technique, which encompasses an investigation of the Strengths, Weaknesses, Opportunities, and Threats related to each course being taught (3-5). A SWOT analysis enables an evaluation of a course's current status from both internal (strengths and weaknesses) and external (opportunities and threats) perspectives. Additionally, it provides helpful baseline information for educators desiring to improve or change course content or focus, and provides information for analyzing any specific problems that may be present in the most recent structure of a course. Clearly, students play a key role in the SWOT analysis as they provide direct data related to the processes and outcomes of any particular course (2).

Pedagogical assessment is a systematic process that demonstrates the value of teaching and learning through the process of collecting data, and then summarizing and interpreting the data with the intention of using the findings in order to identify the success of one's program of education. It is important to conduct this assessment periodically, as the educational process is unfolding, and not to wait until its completion to allow the educator to be informed of the students' progress as a learner (3).

The ultimate goal of curriculum evaluation is to ensure that the curriculum is effective in promoting improved quality of student learning. Student assessment can be done during the actual educational process. Assessment of student learning has always been a powerful influence on how and what educators teach, and is thus an important source of feedback on the appropriate implementation of curriculum content (6).

In order to have a positive effect on human health and well-being, educators in health care professions today, including nursing, are required to address the challenges presented by a global investigation into what is the most evidence-based care. Global standardization and facilitation of knowledge through international alliances are important to improving the health and well-being of patients in any health care system (7,8). Furthermore, a large component of successful education involves the actual learning environment, defined as all didactic activities conducted in the classrooms, departments, faculties, and universities. Based on three important components of the learning environment – the physical, intellectual, and emotional climate – perception of this environment by students contributes to the understanding and learning of increasingly international, evidence-based essentials of quality health care delivery (9).

LITERATURE REVIEW

Prior investigators have explored maternity nursing courses in Egypt based on students' evaluations. For example, investigators have examined several aspects of students' experiences while taking maternity care courses, including the assessments of course learning by male nursing students. Eswi et al. pointed out that more than two-thirds of male students reported that the most satisfying aspect of studying maternity nursing was the comprehensiveness nature of the course's theoretical contents (10). However, only thirteen percent reported gaining skills of caring for mothers in general during the labor and delivery process. This low number was attributed to a shortage in gaining practical skills due to poor facilities and barriers faced by

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students in clinical areas in hospitals. Over half of the male students (53.6%) reported a non-supportive attitude of their clinical instructors as being a major barrier to their learning about maternity care.

Anees et al. reported that the problems faced by male students during a maternity clinical course included difficulties in acquiring the skills required of them, in part because of the need for advanced clinical training requirements while in the clinical setting (11). With regard to male participation in the course, almost one-third of respondents described the course as an embarrassing experience for the male student nurses. Only fifteen percent said that the course was very effective. Although over one-third of the participants (35.1%) described it as an interesting course, one-fifth (19.5%) described it as being boring. This dilemma of male nursing students engaging in a maternity care course has not been limited to Egypt. Keogh et al. when comparing male nurses' experiences in Ireland to those in the United States, reported that "cold and hostile" (p. 257) attitudes of midwives towards male nursing students in Ireland made the placement uncomfortable for the male participants, who, in many cases, were not permitted to participate in a full range of caring interventions during their obstetric clinical placements (12).

El-Nemer et al. who studied Egyptian students' experiences while taking an online maternity course, reported both positive feedback and challenges that the students met while taking the course (13). The authors suggested that online learning helped learners to engage in learning process and improved their understanding and acquisition of learning skills. This finding was supported by an investigation of online learning conducted in Saudi Arabia by Hamdan (14), who found that online education offered students greater control over the learning process, including the ability to post their feedback and assignments online and to discuss points that interested them in the course readings.

Beyond the study of Egyptian maternity courses, additional international nursing courses have been evaluated for best practices in teaching and preparing nursing students for their careers. Different studies conducted by Hickey, Papastavrou et al. and Saarikoski et al. have concluded that clinical supervision is an important element in facilitating learning in the clinical setting (15-17). Likewise, the findings reported by Lambert et al. were that supervision by clinical teachers in the clinical environment is vital for students' learning (18). Clinical nurse educators' roles are to enhance learning through provision of opportunities for learning that include supporting, guiding, and conducting timely and fair evaluations. However, in these studies, students felt that this role is not fulfilled completely because clinical nurse educators spend more time in evaluation than supervision.

In addition, Chuan et al. reported that heavy workload and attitudes of staff compromised supervision of students, while the positive clinical performance of students increased if they were given necessary support in the clinical environment (19). In a study conducted by Girija et al. with Omani nursing students, the students perceived professional competence of clinical teachers as the most important characteristic for the students' ability to learn, followed by the teachers' relationship with students, and the personal attributes of the educators (20).

Warne et al. investigated the clinical learning experiences of nursing students throughout Europe, and noted that even though there were variations on supervisory models from country to country, students were most satisfied with regular discussions and mentorship from clinical supervisors, especially when individualized supervision was emphasized (21). These findings spoke to the need for precise planning for clinical training and supervisor competencies.

Frankel noted that the clinical learning environment can influence nursing students' learning positively or negatively. Positive learning is especially the outcome when clinical staff has acted in a positive, friendly manner, and have been cooperative and willing to teach and guide students in providing quality patient care (22). The latter situation was found to be dependent on the availability of a well-facilitated environment, which had a positive impact on nursing staff. The reverse, when the environment reflects a shortage of available staff, has tended to impact negatively on nursing staff, and manifested itself in the form of anxiety, boredom, and low productivity in work environment, which in turn has had a negative effect on student learning.

SIGNIFICANCE OF STUDY

Positive learning is associated with several pedagogical factors, including delineation of the learning outcomes for the students, the sequencing of the educational information taught, and the environment in which the students are learning (23). A comparison of the students' views of the maternity courses taught at two distinct Faculties of Nursing in one country would assist educators in measuring the quality of learning within these distinct settings. Although students' perceptions of their education and learning environments have been studied in other nations and reported globally (24), there have been no scholarly reports comparing nursing students' evaluations of their educational experiences in Egypt, particularly as they apply to maternity care courses. Therefore, the authors in the current investigation focused on evaluations of the strengths and weaknesses, opportunities and threats (i.e., SWOT analysis) of maternity courses in two distinct Faculties of Nursing from the perspectives of students as a first step for making any necessary adjustments to the courses to best match international, evidence-based standards and to assess students' achievements in learning the material being taught.

AIM OF THE STUDY

This study aimed to examine and compare the strengths and weaknesses, opportunities and threats related to maternity courses from the viewpoints of nursing students of (A) and (F) Faculties of Nursing who had just completed their respective maternity care courses at the time of the investigation.

SUBJECTS AND METHOD

Study design

A comparative analytic design was used to conduct this investigation.

Study setting

The investigation was conducted in the A and F Faculties of Nursing, within the Maternity Departments of each institution, during the academic year 2015/2016.

Course Descriptions

A comparison of the two distinct maternity courses being offered at the time of the study can be found in Table 1. While the descriptions of the maternity courses offered at both Faculties of Nursing read similar, the researchers have noted the following differences between the courses offered at each university:

1. The maternity course at A University is offered to nursing students in one semester, while that offered at F University is offered in two semesters.
2. A weekly clinical rotation exam for ongoing evaluation of clinical practice knowledge is part of the curriculum for students at A University, while students at F University are evaluated every two weeks.
3. An objective structured clinical examination (OSCE) is used for a final evaluation of clinical practice at A University, while an OSCE has not been part of the student evaluation process at F University.

Subjects

A total of 150 third year nursing students enrolled in maternity courses at the A and F Faculties took place in the investigation. There were 75 participants each from the two maternity courses, which consisted of 58.6% of the students from A (total n=128) and 82.4% of the students from F (total n=91). All participants were volunteers, and each received an explanatory statement detailing the study parameters and was informed that all information collected would be anonymous, with no names attached to any data collected.

Administrative approval

The official approval for the investigation was obtained by permission from the Deans of the Faculties of Nursing at F University & A University.

Human subjects

The study protocol was approved by pertinent research and ethical committees at each university. Informed consent was taken from every student before inclusion in the study. Participants were assured that all their data were highly confidential. Protection of identity was assured through assigning a code number for each student instead of names to protect their privacy. Data were only available to the researchers for analyses.

Data collection tool

TABLE 1:

Curricula comparison of maternity care courses offered at A UNIVERSITY and F UNIVERSITY

	A UNIVERSITY*	F UNIVERSITY+
Number of faculty/staff members	17 faculty members + 6 assistant staff members for 128 students (a ratio of 5.7 students per faculty/ staff member)	3 faculty members + 2 instructors + 3 assistant staff members for 91 students (a ratio of 11.4 students per faculty/staff member)
Training background of staff members	Each faculty/staff member must have at least 2 years of training at a university hospital as a resident nurse before becoming an instructor. Each instructor works with students under supervision by an experienced faculty member until the instructor obtains a master's degree.	There is no formal training system or number of years as a resident nurse required to become a staff member. The experience required of staff members is that they have worked as a teacher for a secondary school of nursing, and that they have a bachelor's degree.
Number of semesters	One semester taken in 4 months	One semester taken in 4 months; course offered in 2 semesters
Curriculum	Obstetrics & Gynecology of Nursing (normal pregnancy, abnormal pregnancy, & gynecology)	Obstetrics & Gynecology of Nursing (normal pregnancy; abnormal pregnancy and gynecology only partially covered due to shortage of teaching staff)
Theoretical hours **Practical hours**	60 hours 300 hours	64 hours 296 hours
Teaching and learning methods	Lectures, seminars, written assignments, case studies	Lectures, audio-visual aids, observation
Simulation labs	2 obstetric & gynecologic simulation labs	No specific obstetric & gynecologic simulation labs. Available labs shared with other departments.
Hospital training	10 weeks (18 hours per/week)	Hospital training is very limited due to not enough time is allocated for clinical training
Log book for evaluation of clinical performance/competence	Log book "for competency evaluation in lab training"	Not available
Student assignments	Classroom assignments that require active participation; clinical practice in a laboratory setting; written and oral examinations	Written paper; written and oral examinations
Evaluation of theoretical learning	Written examinations – midterm and final; oral examination at the end of the term	Written examinations – midterm and final; oral examination at the end of the term
Exam marks/scoring	Use of computerized electronic marking	Exams graded manually by staff in the department
Clinical Evaluation 1. **Periodical** (weekly evaluation) 2. **Final evaluation** (end of semester)	Performance test in a laboratory setting using simulations; hospital clinical evaluations. Refusal of allowing male students at hospital for clinical training (all their training performed in simulation lab). Objective structured clinical examination (OSCE).	Simulation lab is not available. Shortage in laboratories & hospitals available for clinical experiences. Refusal of allowing male students at hospital for clinical training. No OSCE used.
Infrastructure/facilities of the Faculty	2 large class rooms with a capacity of 150 students; 2 larger class rooms with capacity of 300 students, equipped with an audiovisual system	Small class rooms not sufficient for the number of students. Shortage in big capacity class rooms. Shortage of audiovisual aids.

*Obstetrics & Gynecological Nursing Department Staff, Faculty of Nursing, A University, 2014

+Obstetrics & Gynecological Nursing Department Staff, Faculty of Nursing, F University, 2014

The investigation questionnaire consisted of two sections

A- The first section was related to students' evaluations of the theoretical elements of the maternity curriculum and addressed six domains:

1. The students' evaluations of the course objectives, with regard to the students' perceptions of the relevancy, organization, clarity, and specificity of the objectives to the course.
2. The students' thoughts on the appropriateness, availability, time sufficiency, innovation, and advanced level of content of the lectures & methods of teaching.
3. Students' evaluation of the innovation, quality, completion, and accessibility of the source material for the curriculum.
4. Students' perceptions of the appropriateness, objectivity, diversity, relevancy, and time efficiency of the courses' evaluation methods.
5. Students' assessments of the capabilities and skills, flexibility, and patience of the course teachers.
6. Students' perceptions of the adequacy, equipment, healthiness, and appropriateness of the learning environment.

B- The second section related to participants' evaluations of the clinical component of the maternity curriculum and consisted of three domains:

1. The students' assessment of the clinical portion of the course, including its planning, its relevance to perceived future professional responsibilities, its ability to impart acquisition of new skills, opportunities for the re-application of already known practice skills, and its time efficiency.
2. The students' evaluation of the sufficient competencies, skills, flexibility, patience, and efficient teaching skills of the teachers/ clinical instructors.
3. The students' perceptions of the adequacy, equipment, convenience, efficiency, capacity, usability, and maintenance of the learning environment.

Evaluation of the elements of these first two sections was accomplished by

responses along a four-point Likert scale, with students' able to rate each statement as being fair, good, very good, or excellent.

PROCEDURE

The investigation was conducted at the end of the year after completion of the semester during which time the maternity course was taught. A cover letter was attached to the questionnaire indicating the aim of the study. Then a self-directed, questionnaire was administered in Arabic to the nursing students who had completed the course. This investigative tool was validated by the Quality Assurance Units at both the Faculties of Nursing at F and A Universities, as derived from the National Commission for Academic Accreditation & Assessment of Egypt.

The questionnaires were completed in the classroom. Any clarifying inquiries by students about the questionnaire were answered by researchers in each faculty while the questionnaire was being completed. As students completed the questionnaires, they were collected by researchers at each institution, and data were entered into SPSS software by the researchers themselves.

STATISTICAL ANALYSIS

The data were tested for normality using the Anderson-Darling test and for homogeneity variances prior to further statistical analysis. Categorical variables were described by number and percent (N, %), whereas continuous variables were described by mean and standard deviation (Mean, SD). Chi-square and Fisher exact tests were used to compare categorical variables, while comparisons between continuous variables were made by use of t-tests. A two-tailed p-value of <0.05 was considered statistically significant. All analyses were performed using SPSS 20.0 software.

RESULTS

The response rate of third year nursing students for this investigation was 75 out of 91 (82.4%) from the F Faculty of Nursing and 75 out of 128 students (58.6%) from the A Faculty of Nursing.

Strengths/Opportunities

Regarding students' feedback about the strengths/opportunities and weaknesses/threats of the two respective maternity courses, there were a number of significant differences noted that mostly favored the course taught at A as compared to the course taught at F (Table 2). In terms of the maternity theoretical course, the course objectives; the lectures and methods of teaching; the evaluations of the teachers; the evaluation methods used for the courses; and the learning environments present for the courses all favored the maternity course offered at A ($p<0.05$). Likewise, and even more dramatically, the students at A reported a significantly greater satisfaction with the maternity clinical course, its teacher/clinical instructor, and its learning environment than did the students at F ($p<0.05$) (Table 3).

Further support for the maternity coursework offered at A University, when compared to that which was offered at (F), was garnered by asking students specific questions about the respective courses' content and organization. The A course was significantly stronger than the F course in terms of:

- The clarity of the curriculum plan (93.3% vs. 48.0 %, p=0.001)
- The appropriateness and extent of course contents covered (49.3% vs. 24.0%, p=0.002)
- The organization and updated content of the course (58.7% vs. 28.0%, p=0.001)
- The active and positive participation of the students (44.0% vs. 21.3%, p=0.005)
- The ability to implement theoretical and practical knowledge (93.3% vs. 48.0%, p=0.008).

Table 1 shows that there was an obvious significant statistical difference regarding feedback of students among studied groups. The feedback was including, the relevancy and clarity of theoretical; course objectives; the appropriateness; availability; innovation of methods used for teaching and the adequacy; equipped; healthy; appropriateness of the learning environment with a statistical significant at (P. value=0.001 &,0.001 & 0.000) respectively. In spite of there was difference between the percentages of reported scores of feedbacks of students regarding curriculum source; capabilities and skills of the teacher and methods used for evaluation of theoretical curriculum, but no significant statistical difference was noted (P. value=(0.011, 0.029 & 0.020).

Table 3 shows that a lot of weakness points were reported from the evaluation of students to clinical maternity course among both faculties but with higher percentages in Al-fayoum faculty as lack of laboratory rooms (30.7% *vs.* 80.0%), areas for clinical training (40.0% *vs.* 86.6%), reliance on instructors from ancillary staff from other departments(13.3% *vs.* 60.0%), lack of updating clinical evaluation methods (48.0% *vs.* 72.0%), absence of objective criteria for practical tests was (52.0% *vs.* 80.0%), for insufficient equipment was (53.3% *vs.* 93.3%) and high training burden on clinical instructors revealed (52.0% *vs.* 80.0%) with higher significant statistical difference at (P. value =0.001, 0.001, 0.001, 0.005, 0.001 & 0.001) respectively. In addition, regarding weak points of theoretical course also revealed significant statistical difference between participated groups due to regular revision of curriculum and revealed (42.7% *vs.* 66.6%) with a statistical significant at (P=0.005). Lack capacity of classrooms and library to students revealed (40.0% *vs.* 89.3 %) with a statistical significant at (P. value=0.001), Inadequate number of books and references revealed (46.7% *vs.* 88.0%) with a statistical significant

TABLE 2:

Feedback of students regarding maternity theoretical course among studied groups

ITEM	LOCATION				P VALUE*
	Assiut		Al-fayoum		
	No.	%	No.	%	
The course objectives (Relevancy, organization, clarity, specificity)					
Fair	4	5.3	10	13.3	0.001*
Good	11	14.7	27	36.0	
Very Good	23	30.7	20	26.7	
Excellent	37	49.3	18	24.0	
Lectures & methods of teaching (Appropriateness, availability, time **sufficiency, innovation, advance**)					
Fair	5	6.7	11	14.7	<0.001*
Good	10	13.3	37	49.3	
Very Good	30	40.0	14	18.7	
Excellent	30	40.0	13	17.3	
Source of curriculum (Novelty, quality, completion, ease ability, advanced)					
Fair	8	10.7	17	22.7	0.011*
Good	20	26.7	12	16.0	
Very Good	22	29.3	33	44.0	
Excellent	25	33.3	13	17.3	
Teacher (Capabilities and skills, flexibility and patience)					
Fair	5	6.7	11	14.7	0.029*
Good	22	29.3	33	44.0	
Very good	29	38.7	22	29.3	
Excellent	19	25.3	9	12.0	
Evaluation methods (Appropriateness, objectivity, diversity, relevancy, time efficiency)					
Fair	10	13.3	21	28.0	0.020*
Good	25	33.3	31	41.3	
Very Good	20	26.7	16	21.3	
Excellent	21	28.0	9	12.0	
Learning environment (Adequacy, equipped, healthy, appropriateness)					
Fair	5	6.7	45	60.0	0.000*
Good	10	13.3	17	22.7	
Very Good	20	26.7	9	12.0	
Excellent	40	53.3	4	5.3	

*Significance value set at p < .05

TABLE 3:
Feedback of students regarding maternity clinical course among studied groups

ITEM	LOCATION				P VALUE*
	Assiut		Al-fayoum		
	No.	%	No.	%	
Clinical Course (planned, relevant to future professional, acquisition of new skills, opportunities to re-application of the practical skills, time efficient)					
Fair	7	9.3	37	49.3	0.006*
Good	7	9.3	28	37.3	
Very Good	45	60.0	5	6.7	
Excellent	16	21.3	5	6.7	
Teacher/clinical instructor (Sufficiency capabilities and skills, flexibility and patience, efficiency, potentials)					
Fair	7	9.3	15	20.0	<0.001*
Good	12	16.0	35	46.7	
Very Good	42	56.0	18	24.0	
Excellent	14	18.7	7	9.3	
Learning environment (Adequacy, equipped, convenience, efficiency capacity, usability, maintenance)					
Fair	8	10.7	42	56.0	<0.001*
Good	12	16.0	22	29.3	
Very Good	46	61.3	10	13.3	
Excellent	9	12.0	1	1.3	

***Significance value set at p < .05**

at (P. value=0.001) and lack of computers' labs for searching (60.0% *vs.* 100.0%) with a statistical significant at (P. value=0.001) in Al-fayoum and Assiut respectively.

Weaknesses/Threats

Just as revealing as the strengths and opportunities gauged by the students in the two distinct faculties, their assessments of the weaknesses and threats of each course also offered data regarding the relevance of the courses to the students. Again, the course taught at A appears to be stronger than the course at Al-fayoum. There were significant differences in various metrics, with students from F more likely to assess their maternity course's lack of laboratory rooms, lack of actual areas for clinical training, overreliance on instructors from ancillary staff in other departments, a lack of updating clinical evaluation methods, absence of objective criteria for taking of oral and practical tests, insufficient laboratory equipment, and a perceived high training burden placed on clinical instructors (Table 4).

In addition, data revealed further statistically significant differences in students' assessments of their respective maternity courses, with greater numbers of F students stating that the curriculum was not revised on a regular basis, the classrooms and library lacked sufficient capacity, there were an inadequate number of available books and references, as well as a general lack of computer labs (Table 4).

With regards to perceived problems related to student learning during the teaching of the two maternity courses, three fourths (n=57; 76.0%) of the student respondents at F University reported that the faculty rules & policies in place for dealing with students' needs were insufficient, whereas only 30 of the A students (40.0%) reported the same complaint about faculty rules and policies. The difference between the two bodies of students was significant (Table 5).

Additional significant differences between the opinions of students taking the two maternity courses at the respective universities included: (a) over 90% (n=68) of the F students' believed that the policies of hospital directors were obstacles to student training opportunities, while two-thirds (n=50; 66.7%) of the A students believed the same (p<0.001); and (b) 60% (n=45) of F students reported that the lack of male students desiring to study obstetrics had a negative effect on the maternity curriculum, while only 40% (n=30) of A students held the same opinion (Table 5).

DISCUSSION

Learning takes place when students apply what they have learned in classroom situations and are able to practice in a simulation laboratory that mimics the reality of nursing practice, and are able to practice in actual clinical settings themselves. Clynes defined feedback as a collaborative process of providing insight to learners about their performance (25). Therefore, feedback is a prerequisite for effective learning. Curriculum evaluation can be broadly defined as the "continuous systematic process of gathering information about all elements of a curriculum analysis and interpretation to help arrive at an understanding of the extent to which goals, objectives and outcomes have been achieved and subsequently take informed decisions for further improvement" (25).

The current investigation used SWOT analyses of two distinct nursing curricula – one based in a traditional Faculty of Nursing (A University) and the second based in a more recently developed Faculty of Nursing (F University). The focal point of these analyses was a survey distributed to students of a nursing maternity course in each of the two Faculties.

The current findings revealed that there were obvious significantly statistical differences in the feedback of students among studied groups regarding the maternity nursing courses' objectives, methods of teaching, and respective learning environments. Differences included more than one third of students in A University evaluating the objectives, teaching methods, and learning environment as more positive than that reflected in the responses from the F University students. Likewise, the capability characteristics of educators at A were rated more positively than those of the educators at (F).

In the current investigation, A students also offered more positive statistically significant feedback, when compared to the F students, regarding the planning of the course; its relevance to future professionalism; the acquisition of new skills; opportunities for re-application of the practical skills; and time efficiency. Moreover, the current findings demonstrated that more than half of students at A Faculty reported that their evolution to proficiency, their capabilities and skills, and their efficiency of practice as related to the maternity course, were "very good," while less than half of F Faculty students rated their similar learning experiences as only "good," with the differences between the two faculties being significant.

In addition, more than two thirds of the A university nursing students confirmed that the learning environment (adequacy, equipped, convenient, efficiency, capacity, usability, and maintenance) was "very good," which was significantly different from the more than half of the F students, who rated

TABLE 4:
Perceived weaknesses of the maternity courses among studied groups

ITEM	WEAKNESS				P VALUE*
	Assiut		Al-fayoum		
	No.	%	No.	%	
Curriculum is not revised regularly.	32	42.7	50	66.6	0.005*
Lack of labs used for procedures demonstration	23	30.7	60	80	<0.001*
Lack of suitable areas for clinical training	30	40.0	65	86.6	<0.001*
Reliance on instructors from ancillary staffs	10	13.3	45	60	<0.001*
Lack of updating evaluation methods	36	48.0	54	72	0.005*
Absence of objective criteria for oral and practical tests	39	52.0	60	80	<0.001*
Lack of system that allows student access his mistakes in exams	39	52.0	42	56	0.739
Use of exams to measure the level of academic achievement	40	53.3	41	54.6	0.992
Insufficient equipped labs	40	53.3	70	93.3	<0.001*
High training burden on clinical instructors	39	52.0	60	80	<0.001*
Unequal training opportunities for male students	36	48.0	52	69.3	0.013*
Lack of periodical maintenance for equipment and simulators	37	49.3	40	53.3	0.744
Lack of classrooms capacity and library to students	30	40.0	67	89.3	<0.001**
Absence of curriculum contents pertaining to the field of male students	34	45.3	50	66.6	0.014*
Inadequate numbers of books and references	35	46.7	66	88	<0.001*
Lack of computer labs	45	60.0	75	100	<0.001*
Inadequate time for practice	39	52.0	60	80	<0.001*
Male students not accepted to train in women's specialty	33	44.0	48	64	0.022*
Increase the number of students	70	93.3	69	92	0.998
Insufficient supervision in training location places	40	53.3	65	86.6	<0.001*
Lack of follow-up and continuous assessment due to insufficient number of staff members	44	58.7	60	80	0.008*

*Significance value set at p < .05

TABLE 5:
Perceived threats of maternity course among studied groups

ITEM	THREATS				P VALUE*
	Assiut		Al-fayoum		
	No.	%	No.	%	
Lack of employment scope for male students	33	44.0	40	53.3	0.317
Unequal training opportunities male vs. female students	40	53.3	45	60.0	0.509
Faculty rules & policies in dealing with the problems of students' needs	30	40.0	57	76.0	0.002*
Lack of male students' desire to study obstetrics curriculum	30	40.0	45	60.0	0.022*
Absence of training & job opportunities for male's students	40	53.3	45	60.0	0.509
Obstacles in policies of hospitals' directors for students' training	50	66.7	68	90.7	<0.001*

*Significance value set at p < .05

the learning environment as "fair." This difference between two studied groups could be a result of the newness of the F Faculty, as it is a new faculty initiated within the last decade, and was known to have a shortage of resources at the time of the investigation.

In regards to the strong aspects of studying in the maternity course, the students in both groups viewed that their respective maternity courses possessed many positive aspects. However, there was a statistical difference between the two groups as pertains to the students' views of their respective maternity course's strengths. The A students stated that a clear plan of the curriculum content was covered, the appropriate use of modern teaching techniques was implemented, the clinical staff's theoretical and clinical knowledge was evident, and the acquisition of professional skills relevant to clinical practice was realized. This difference could be attributed to sufficient resources, budget, and infrastructure available at the A Faculty when compared to the state of the (F) Faculty.

The greatest points of weakness noted in the current study were reported more often by the nursing students at the F Faculty. These included a lack of laboratory rooms and sufficient equipment for clinical and simulation training, reliance on clinical instructors from other departments whose specialties were not in maternity care, a lack of updating clinical evaluation methods, an absence of objective criteria for practical tests, and a greater training burden perceived to be experienced by available clinical instructors. In addition, with regard to the theoretical maternity course, there was a significant statistical difference between the two groups of students, with respondents at F reporting a curriculum that has not been revised regularly, and a lack of availability of classrooms and library resources due to a perceived shortage in means and budget. Also noted with greater intensity at F was a deficiency in the faculties' infrastructure, including teacher lack of experience, insufficient number and capabilities of educators, and a disproportionate number of students to the number of available teachers.

CONCLUSION

The findings of the current investigation represent nursing students' opinions in two distinct Egyptian Faculties of Nursing regarding the status of the maternity care courses – both theoretical and clinical – taught at

their respective universities. Clearly, the students at A University viewed their maternity courses as being more beneficial to their learning and future practices than did the students at F. A student spoke more highly of the theoretical and clinical courses' objectives, lectures, teachers, evaluation methods, and overall learning environment.

F students were more likely than the A students to note the weaknesses and perceived problems of their maternity courses. Interestingly, both groups of students noted difficulties in their respective courses for male students, with over half of both groups remarking on the absence of training opportunities for male students in their maternity clinical courses.

The study undertaken here demonstrated that investigations and evaluations of the quality of maternity courses based on students' viewpoints can contribute to quality improvement in preparing and implementing those courses. Student involvement in assessing the elements of theoretical & clinical courses can expand effective education in maternity nursing. The use of a SWOT analysis was able to demonstrate this when surveying students from the two universities. The study also was able to identify gaps in achieving objectives of the maternity courses in both faculties. Clearly, at least from the students' perspectives, the maternity courses at (A) were viewed as stronger by most parameters than the similar courses being taught at (F).

Utilization of positive elements (strengths and opportunities) of a course, and addressing negative aspects of a course (weaknesses and threats) can be effective steps in promoting the quality of maternity education in Egypt. Discovering the reasons for the significant differences between students' perceptions of the courses offered at A and F can assist in improving the F course, and perhaps help to standardize maternity education throughout Egyptian universities.

Students' assessment of their curricula should be considered when judging the quality of courses, and the use of a SWOT analysis should definitely include student feedback. Indeed, the extent of the differences between maternity courses at just these two universities points to the need to conduct SWOT analyses, including student surveys, at Faculties of Nursing throughout Egypt where maternity courses are taught. Not only do the future careers of the nursing students depend on the assessment and revising of maternity courses, but also the health and well-being of the women and newborns for whom future nurses offer care is dependent on offering the most effective training in maternity courses.

RECOMMENDATIONS

- Students' assessment of their curricula should be considered when judging the quality of courses.
- The use of a SWOT analysis should definitely include student feedback.
- Indeed, the extent of the differences between maternity courses at just these two universities points to the need to conduct SWOT analyses, including student surveys, at Faculties of Nursing throughout Egypt where maternity courses are taught.

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