Nurses' Knowledge and Practice about Cesarean Section

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الخلاصة

الهدف: يهدف البحث إلى تنبيم معارف وممارسات الممرضات فيما يتعلق بالعملية القيصرية.

المنهجية: أجريت دراسة وصفية في مدينة الموصل في مستشفى البتول للنساء والولادة. تتكون عينة البحث من (20) ممرضة من اللواتي يعملن في صالات الولادة و)21(ممرضة قابلة. تم استخدام الاستبيان كأداة لجمع البيانات يتضمن القسم الأول المعلومات الديموغرافية عن الممرضات. القسم الثاني فقرات معارف الممرضات حول العملية القيصرية. تضمن القسم فقرات عن ممارسة الممرضات للعملية القيصرية تم إعداد الاستبيان عن طريق استخدام نقطتي تسجيل لتنبيم الممرضات فيما يخص استخدام العملية القيصرية في صالات العمليات. تم تحديد صلاحية المحتوى من قبل لجنة من الخبراء. تم تحديد أمكانية الاعتماد على أدوات الاستبيان عن طريق استخدام منهج الاختبار و أعادة الاختبار و كانت المدة بينهما أكثر من أسبوعين.

النتائج: توصل البحث إلى أن متوسط أعمار الممرضات كان 35.85 ± 10.44 سنة وان 15% منهن دون سن 26 سنة, وأن 60% منهن متزوجات, فيما يتعلق بمستوى التعليم, 5% منهن خريجات مدارس التمريض. وكان متوسط فترة العمل التمريضي لهن في المستشفيات كان *17.95) 1.50 (1 سنة وان أكثر 20% منه لديهن معلى ع30 30 سنة خدمة في أقسام النسائية والتوليد.

التوصيات: يوصي الباحث بالتأكيد على وزارة الصحة لإجراء دورات تدريبية للممرضات ممن لديهن مؤهلات لتدريبهن على كيفية التعامل مع العملية القيصرية كما أن الممرضات اللواتي يعملن في وحدات الأمومة يحتجن إلى سياسة واضحة و وصف للخدمة من قبل وزارة الصحة.

Abstract

Objectives: The study aimed at the assessment of nurses' knowledge and practice concerning Cesarean Section.

Methodology: A non-experimental approach was carried out throughout the present study with the application of a descriptive design a for the study subject. The study was carried out at two maternity hospitals in Mosul city namely Al-Barolo and AL Khansa Hospitals. A purposively sample consist of (20) Nurse who are working in operation theater. The questionnaire was used as a means of data collection; it comprised (3) major parts. Part one presented the demographic data. Part two, consisted of items of Nurses' knowledge about Cesarean Section. While, part three consisted of items of Nurses' practices about Cesarean Section. Content validity was determined by presenting the items to a panel of experts. Reliability of the questionnaire was determined through the use of test and re-test approach.

Results: It has been found that the mean age of the nurses was 35.85 ± 10.44 years, and 15% of them was less than 26 years. Sixty percent of them were married. For the level of education of the nurses, 55% of them were graduated from intermediate nursing schools. The mean duration of nursing work in hospitals was 17.95 ± 11.50 years, and about 20% of them have more than 30 years in nursing work. Additionally, about half of them have not worked in obstetric and gynecology departments.

Recommendation: The researcher recommends that the Ministry of Health should conduct training courses for the Nurses who have qualifications to teach how to deal with Cesarean Section and the Nurses who work in maternity unit need clear policy, job description by Ministry of Health in the operation theater.

Key Words: Nurse, Cesarean Section

Introduction

World Health Organization (WHO) [1] (1993) reported that more than (200) million women become pregnant every year; (23) millions of these develop complications which require skillful management and treatment, during pregnancy and labor. In developing world, it is estimated that (600.000) die annually during pregnancy and labor .The risk of mothers dying as direct causes of pregnancy and labor in Africa is (1:13), compared to (1:7,3000), for example, in Canada [2]. Over 4 million newborn babies die each year, most of them as a result of poorly managed pregnancies and deliveries. More millions women and babies suffer debilitating and life-long consequences of ill-health. The majority of maternal mortality is due to obstructed labor, sepsis, hemorrhage, and hypertension disorder during pregnancy.

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The objectives of the current study were to assess the knowledge and practice of nursing staff in Cesarean section (pre, ante, and post operative). As well as, to determine the magnitude relationship between nurse's knowledge and practice and their demographic characteristic include (age, level of education, duration of experience at maternity operation and duration experience at obstetric theater).

Methodology

A descriptive approach was carried out throughout the present study with the application of a descriptive design for the study subject. The study was carried out at two maternity hospitals in Mosul city namely Al-Batool and AL Khansa Hospitals. The study subjects consist of (20) Nurse who are working in operation theater. The questionnaire was used as a means of data collection; it comprised (3) major parts. Part one presented the demographic characteristics of the Nurses. Part two consisted of items about Nurses' knowledge about Cesarean Section. It was dichotomous scale of "Yes" and "No" about Nurses' knowledge about Cesarean Section in Operation Theater with a rating of (1) for "I know" and (0) for "1 don't know". While, part three consisted of items about Nurses' practices about Cesarean Section. It was a (3) point scale for the assessment of Nurses' practices during Cesarean Section in operation theater with a rating of (3) for "always" (2) for "sometimes", and (1) for "never". Content validity was determined by presenting the items to a panel of experts. Reliability of the questionnaire was determined through the use of test and re-test approach and the interval between the two tests was a period of more than two weeks.

Results

Table (1) Distribution of (20) Nurse according to socio-demographic characteristics.

Characteristics	Mean + 50	Groups	No.	0/
Age (years)	35.85 ±10.44	**<30**	9	45.0
		31-40	3	15.0
		41-50	6	30.0
		>50	2	10.0
Education level	Intermediate nursing school		11	55.0
	Secondary nursing school		6	30.0
	Nursing Institute		3	15.0
Duration of Experience (years)	17.95+11.50	1-10	6	30.0
		11-20	4	20.0
		21-30	6	30.0
		>30	4	20.0
Duration of nursing experience in obstetrics dept, (years)	4.65 ±5.60	**0**	9	45.0
		1-5	6	30.0
		>5	5	25.0
Duration of nursing experience in the operations room (years)	13.15 ±10.0	1-10	8	40.0
		11-20	6	30.0
		>20	6	30.0
Marital status		**Single**	8	40.0
		Married	12	60.0
Training courses		**0**	9	45.0
		1-5	8	40.0
		>5	3	15.0

Table (1) shows the socio-demographic characteristics of the studied nurses. The mean age of the nurses was 35.85 ± 10.44'years, and 15% of them aged less than 26 years. Sixty percent of them were married. For the level of education, 55% of them were graduated from nursing schools. The mean duration of nurses' work in hospitals was 17.95 ⊣ 11.50 years, and about 20% of them have more than 30 years experience in nursing. Additionally, about half of them not have experience in nursing in obstetric and gynecologic departments. More than 50% of the sample has more 10 years experience in nursing in operating room. Forty five percent of them without training courses and 15% have more than five training courses.

Table (2) Nurses' knowledge in the pre, intra and post-obstetric operations compared with the theoretical mean.

Knowledge	Mean ± SD	Theoretical mean	t-value	p-value
Pre-operative	**7.25-2.15**	**10.0**	*6.76*	**<0.001**
Intra-operative	**1.55 ±1.40**	**2.5**	**3.55**	**<0.001**
Post-operative	**9.60+4.95**	**12.5**	**6.42**	**<0.001**

Table (2) shows significant differences in the pre, intra and post obstetric operations knowledge test results of the studied nurses compared with the theoretical mean (t ■ 6.76, 3.55 and 6.42), respectively.

Table (3) Nurses' practice in the pre, intra and post-obstetric operations compared with the theoretical mean.

Practice	Mean ± 510	Theoretical mean	t-valuc	p-value
Pre-operative	**8.80 ±3.07**	11.0	**8.45**	**<0.001**
Intra-operative	5.00-+3.11	*7.5*	**5.03**	**<0.001**
Post-operative	**13.80 ±9.15**	17.5	**2.10**	**<0.001**

Table (3) shows significant differences in the pre, intra and post obstetric operations practice test results of the studied nurses compared with the theoretical mean (t = 8.45, 5.03 and 2.10), respectively.

Table (4). Analysis of variance for Nurses' Knowledge and practice according to their demographic characteristics.

Factors	Knowledge	Practice	P value
Age	FO.482	F=2.435	٢5
Educational level	FO495	FO.882	٢5
Duration of experiences in general wards	F=3·4io	FO.681	NS
Duration of experiences in operating room	FO429	FO.O12	NS

Discussion

The results demonstrate that all items of knowledge and practice regarding Cesarean Section have low mean scores in the pre, intra, and post operation. (Tables, 3.4). This result is in agreement with the study carried out in Malawi by Burgess (3), who found that skill and knowledge vary widely among individuals in different staffs of nurse- midwives. (4) Stated that there is a lack of knowledge regarding the care of Cesarean Section among nurse-midwives who work at the Maternity ward. This result is in consistence with the study of Barriball (6) which revealed that there is a lack of nurse-midwives who practice at the delivery room and there is a need for an educational program to gain correct or accurate practices at the maternity wards. This result is in agreement with that of Laster (7) ٣٦٥ indicated that the nurse-midwives who are working in Maternity ward didn't have adequate knowledge and practices concerning Cesarean Section. Therefore, an educational program will give them the chance to improve their knowledge and practice concerning. The present study showed that the highest percentage (45%) of nurse-midwives age is less than (30) years old. The age of nurse in this study is in agreement with the study of Biro, who studied the team midwifery care in tertiary level obstetric services. The mean age of nurse-midwives is (28, 2) years. Besides, the results of this study are similar to the one conducted in 1992 by Cartmill and Thornton in Dublin(s) who found that (37%) of nurse-midwives were within the age group (26-30). There was no statistical significant difference between nurse-midwives knowledge and practice and their age (Table 4).This fact can be interpreted in a way that the nurse-midwives were governed by restricted rules regarding the Cesarean Section at the delivery room. This study is in agreement with that of Mccourt et.al. (8) They stated that midwives practice concerning Cesarean Section has been affected by the age of midwives. It is found that the older nurses are more skills than the younger nurses. Another study that has been done by Sanadin etal. (9), indicated that the youngest ages of nurse-midwives were found to gain improvement in the knowledge and practice more than the older age nurse-midwives. Mcinerney et.al. (10) stated that the older nurse-midwives had better performance than the younger probably due to their orientation and benefits that may be gained out of their employment. Regarding the level of education, the majority of the study sample (55%) had low level of education; they were graduated from primary school of Nursing. WHO ٢٠ defined a nurse midwife as a person who is qualified to practice midwifery i.e. to attend normal delivery, she got a lot of training to conduct normal deliveries on her own responsibility and to care for the newborn infant. WHO (11) also mentioned that a midwife will fulfill the requirements of the newly delivered mother and her fetus and monitor their progress at least for the first 10 days after delivery. Other studies are in consistent with this study which shows that the nurse midwives with more education deliver more cost-effective care (10).

This result is in consistence with the study of Wood and Theron [13] who reported that the knowledge of the midwives can be significantly in correlation with Nurses knowledge and practice. Waldenstrom et.al. [14] mentioned that the nurses from different educational levels need to learn how they will improve care for pregnant women. The present study indicated that (50%) of the nurses had been employed for more than 20 years in the hospital. This result is in agreement with that of Rowley et.al. [15] who stated that the nurses remain the largest human resources of health care provided which increased the quality of care with the increase of experience in the hospital. The result is also in consistent with that of Bachman and Molloch [16], who mentioned that the quality of nursing care of the patient increased by increasing nursing experience at the hospital. The present study illustrates that the majority (45 %) of the subjects had been working in maternity hospital for less than (1) year of nursing experience. This result is also in consistent with that of Goode [17] who found that nurse-midwives give good health care to the pregnant and labor women if they have more experience in delivery units. There was a significant statistical difference between nurse-midwives knowledge and practice and their nursing experience at the General Hospital (Table 4). This result is in agreement with that of Kaufman [18] who indicated that nursing experiences at the hospital has a significant statistical effect on nurse-midwives knowledge and practice. Khan and Rizvi [19] noticed a strong relationship between nurse-midwives experiences at the hospital and the education of nurse-midwives concerning obstructed labor and how to deal with Cesarean section correctly in obstetric theater. The study is also in consistence with that of Walker et.al. [20], who found that there is a statistical relationship between the nurses who were working in the hospital for a long time and their experience in hospital and improvement in the skills and knowledge of nurse-midwives.

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