Postpartum Health Problems Encountered Among Women Undergoing Cesarean Section and Nursing Implication

Thesis

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Summary

Introduction

The postpartum period is a very special phase in the life of a woman and her newborn and forms a part of the normal continuum of the reproductive cycle (Ricci & Kyle, 2009). It is the most challenging time for the mothers who deliver cesarean babies, since it is one of the major surgeries where both mother and a baby can be at risk (Rock, 2005).

The postpartum period, or puerperium, starts about two hours after the delivery of the placenta and continues for 42 days. It is the period of time when the anatomic and physiologic changes of pregnancy are reversed and the body returns to the normal non-pregnant state (Ministry of Health and population, 2006).

The rate of cesarean deliveries is rising worldwide. The World Health Organization (WHO) estimates the rate of Caesarean sections between 10% and 15% of all births in developed countries. In 2004, the Caesarean rate was about 20% in the United Kingdom, while the Canadian rate was 22.5% in 2001-2002 (Stephen, 2009).

Postpartum period is a time when problems may develop quickly, which if not diagnosed promptly and treated effectively, can lead to illness and death of the mother or infant. It is an area of maternal care that deserves more attention and consideration (WHO, 2005).

In Egypt, a significant rise in C.S deliveries occurred for all births, from a low of 4.6 % in 1992 to 10.3 % in 2000. However hospital-based C.S was much higher in 1987-1988 13.9 % increasing to 22% in 1999-2000 (Khawaja et al, 2004).

Moreover, more than 70% of maternal deaths occur in the postpartum period, especially in developing countries due to a number of

problems, 77% of these complications occur during or shortly after childbirth (within 24 hours). Such as postpartum hemorrhage (88%), puerperal infection (8%) and hypertensive disease (22%) (Jhon & Sons, 2007).

While C.S can save lives and are usually a safe procedures, they do involve major surgery and risks to both the mother and baby. There is an increased risk of infection and needing to be rehospitalized, blood clots, and infertility down the road. Although it is extremely rare for a woman to die during childbirth, there is a greater risk of death to the mother as a result of cesarean compared to vaginal birth. And babies born by C.S are more likely to have respiratory distress and to develop asthma later on (Ranee , 2005).

Complications of the birth process may affect either the mother or the infant. Maternal morbidity following C.S is estimated to be eight times greater than that following vaginal delivery. Infection at the surgical site appears to be a significant source of morbidity, even though the reported infection rate varies substantially across studies, and the reasons for this wide variation are poorly understood (AAFP, 2009). Women undergoing C.S have 5 to 20 folds greater risk for infection and other common complications such as fever, UTIs, bacterimea, endometritis and thrombophlepitis**,** compared with a vaginal delivery **(**Jhon

Since many maternal and neonatal deaths occur in the 48 hours after labour and birth, early postpartum and newborn care is promoted to assess and manage life threatening complications and assist mother and newborn. Skilled care and early identification of problems which arise during this period could reduce the incidence of deaths and disabilities (FHI, 2009).

Postpartum care remains a vital part of the childbearing process that the midwife has to provide for the mother and the baby immediately following birth to the end of puerperium. Postpartum examination is very important in that it confirms the mother's recovery from effects of pregnancy, labour and surgery (WHO, 2008).

Quality health care, during and immediately after the critical period of labour and delivery, is a single most important intervention for preventing maternal and newborn mortality and morbidity. As already stated care during postpartum period provides opportunities for the midwife to check how the mother and baby are doing, to ensure the mother and her infant progressing well, provides support for breast feeding, and enables the health workers to detect and manage any problems early (Ministry of Health and Population, 2005).

AIM OF THE STUDY

The aim of this study was to identify postnatal health problems experienced by women delivered by C.S and thier newborn, and to propose a nursing protocol to meet the needs of the post cesarean women during the puerperium.

Research design:

A prospective study design was adopted in this study to achieve the stated aim.

Setting

This study was conducted in the postpartum wards of Obstetrics Department, Women's Health Center, Assiut University Hospital, Egypt., Egypt.

Sample

A purposive sample of all puerperal women (n=330) puerperal women and their newborns' who had C.S delivery in the study

settings were recruited for this study, according to the following criteria was recruited.

-Inclusion criteria:-

- Gestational age was more than 28 weeks.
- Either primiparous or multiparous
- Whether elective or emergency
- With any type of C.S.
- Multiple pregnancy was included

-Exclusion criteria:-

- Presence of any psychological problems.
- Women with perinatal and neonatal deaths

Tool of data collection

Data collection was done through the use of three types of tools

1- structured interviewing sheet (Annex 1) was designed, validated and utilized by the researcher to be completed from every women admitted to postpartum department after C.S delivery. The data collected in the record included the following parts: (demographic data, obstetrical data, and outcomes of previous deliveries data, current antenatal condition data, and current C.S delivery data.

2- Immediate postpartum assessment sheet: (Annex II) to collect data related to the condition of the woman immediately after delivery i.e. during the fourth stage of labor; until patient's discharge, as vital signs, intake and output, general and local condition of the mother as well as her new born

3- follow up sheet: (Annex III) to record data related to postoperative period and any complications that have arisen during the first postnatal visit (12 day of the puerperium) and second visit (40 Day of the puerperium). Follow up included

patient's condition (vital signs, breasts, wound, uterus, lochia, perineum, lower extremities and elimination) and problems encountered. Also, newborn assessment, included assessment of vital signs, head, chest, abdomen, genitalia and skin condition. Then the proposed protocol was discussed with the mothers and tailored according to each mother and newborn needs.

The results of the study revealed the following findings:

- The mean age of women was 25.85±4.8 years, the highest percentage of them had secondary or university education (51.5%), They mostly were housewives (91.5%) and living in rural areas (72.7%).
- Almost half (50.0%) of women were primigravida, 14.8% had past history of one to two abortions, and (1.5%) had a history of still birth.
- About 67.2% of women had previous cesarean section, spacing between the last cesarean section and the present one, it was 2-3year in the majority of them (55.9%).
- The gestational age of puerperal women ranged between (28-42 weeks) with a mean of 38.945±1.457. The majority (65.7%) of women had normal pregnancy and only 34.3% had high risk pregnancy.
- Repeated C.S was the most common indications with the highest percentage (33.6%), followed by fetal distress (21.5%) and failure of labor progress(8.2%).

- More than two thirds (61.8%) of cesarean sections were emergency, and the great majority of C.S done under spinal anaesthesia (88.5%)
- As for C.S orders about more than one third of women underwent C.S for the second time (38.2%) followed by (32.7%) of them had C.S for the first time.
- More than half of the newborns (62.2%) were below the normal weight (2500 gm) and more than one tenth (11.2%) and 4.5% of them their Apgar score at one and fifth minute were less than 7.
- Less than one fifth (16.4%) of the newborns were admitted to PCU, and more than one fourth (25.8%) of women failed to initiate breast feeding within the first 24 hours after labor.
- Percentage of intra-operative complications was 15.8%, mostly 4.6% had bleeding and only 2 women (0.6%) had bladder injury, an equal proportion (0.3%) had anesthetic complications and rupture uterus.
- The incidence of early major postoperative health problems occurred among (31.2%) of women mostly postpartum fever (16.7%) followed by 5.8% were in need for blood transfusion and 4.5% exposed to chest infection
- The mean duration of hospital stay was 2.45 ± 1.375 days
- Only 36.0% of women were satisfied with nursing care.
- Major health problems encountered among one third (32.4%) of C.S puerperal women during their first postnatal visit, mostly the urinary tract infection (11.5%), followed by wound infection (7.3%) and puerperal pyrexia (3.3%).

- Nearly one fourth of the studied women (25.4%) complained of major health problems during their second postnatal visit The most common types of these problems were the urinary tract infection (3.7%) followed by an equal proportion of wound infection & puerperal pyrexia (2.7% & 2.7% respectively).
- The incidence of minor health problems during hospitalization was 94.5% mostly the general problems (79.1%) followed by GIT problems (75.2%) and about one half of the women had an incision problems 49.4%.
- As regards the incidence of minor health problems during first postnatal visit occurred among 88.8% of C.S puerperal women, mostly general problems (68.8%) followed by muscle skeletal problems (62.4%), incisional problems(55.5%) and breast problems (32.4%).
- Almost three quarters of the studied women (74.2%) suffered from minor health problems during 2nd postnatal visit. mostly (44.1%) complained of general problems, followed by muscle skeletal problems (33.9%) and incisional problems (18.6%).
- During hospitalization more than half (52.1%)of newborns had problems. The most commonly reported problems were that of physiological jaundice (22.1%) followed by respiratory problems (20.6%), Gastrointestinal problems (10%) as vomiting and Congenital anomalies (1.8%).
- During 1st postnatal visit more than two thirds of newborns (70.9%) had problems, and 7 (2.2%) of newborns were died. The most commonly reported problems were that of

GIT problems (39.3%) followed by respiratory problems (20.0%), jaundice (9.6%) and cord problems.

Recommendations

It was recommended to implement a development program for maternity nurse, to raise their awareness about early detection and identification of risk factors and complications of C.S. Provide individualized care during prenatal, natal and postnatal periods to prevent complications. Periodical educational classes for parturient women are suggested. Activate the follow up program for women in postpartum about care needed during postpartum period and postpartum health problems for the mother and newborn related to this expected problems and how alleviate it. Display an educational video during the waiting hours to inform mothers to be about hygienic care, nutrition, sleep and baby care.

Also, it was recommended to conduct further research in different settings to form an evidence based practice.