



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



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**Quality of Nursing Care after Cesarean Section  
in Zero Day in Atbara and Eldamer Hospitals  
From July to September 2021**

**A Research Submitted as Partial Fulfillment for Requirement of  
bachelor degree in nursing**

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**2021**

## الاستهلال

قال تعالى:

﴿وَوَصَّيْنَا الْإِنْسَانَ بِوَالِدَيْهِ حَمَلَتْهُ أُمُّهُ وَهْنًا عَلَىٰ وَهْنٍ وَفَصَّالَهُ فِي سَامِيْنٍ أَنْ

اشْكُرْ لِي وَلِوَالِدَيْكَ إِلَيَّ الْمَصِيرُ﴾

صدق الله العظيم

سورة لقمان، الآية (14)

## Dedication

*To those whom we saw the light through their eyes,*

*To those who held our hands when we took our first steps,*

*To our beloved Mothers, Fathers and siblings,*

*To everyone who taught us a letter,*

*To everyone who gave us a hope and supported us to reach  
this point,*

*To our brothers and sisters.*

## Acknowledgement

Grate full thanks to Allah for guiding and helping us finishing this research

We would like also to express sincere thanks and gratitude to our supervisor **Dr. Maria Elshazaly** for her supervision, guidance, valuable comments and support, the idea of this research until finishing.

Very special thanks to our families for their help and encouragement.

We are grateful to our beloved friends whom shared us happiness and sadness.

To everyone who helped us in this research.

## **Abstract:**

**Background:** The care of the woman after a cesarean birth, is nurses responsibilities it is a combine aspects of surgical and maternity care.

**Objective:** The aim of this study was to Quality of zero day nursing care after caesarean section in Atbara and Aldamer hospitals.

**Method:** A sample of 50 mothers who inter for delivery unit in both hospital for CS. Data were collected using observation check list.

**Results:** The result showed that Measuring vital signs, observe I & O chart, found that the care not done properly in both hospital Atbara & Aldamer, as regard check hardness of uterus done (68%). Initiate breast feeding it was found that done (92%), check bleeding from wound (36%), pain management done (94%), early ambulation, remove catheter after 6 hours, early ambulation, Give IV fluids as ordered, and bowel function were done (100%).

**Conclusion:** The finding of the present study indicate that there was gap between the care providing to the women after CS and standard care.

**Recommendations:** Increasing the number of the nursing staff and provide training and education program.

## ملخص الاطروحة:

**الخلفية:** رعاية المرأة بعد الولادة القيصرية هي مسئولية الممرضين فهي تجمع بين جوانب الرعاية الجراحية ورعاية الأمومة.

**الهدف:** من هذه الدراسة هو جودة الرعاية التمريضية في الـ 24 ساعة الأولى بعد الولادة القيصرية في مستشفى عطبرة والدامر.

**الطريقة:** عينة من 50 من الأمهات اللواتي يدخلن في وحدة الولادة في كلا المستشفيات من أجل الولادة القيصرية. تم جمع البيانات باستخدام قائمة فحص المراقبة.

**النتائج:** أظهرت النتائج ان قياس العلامات الحيوية وحساب السوائل الداخل والخارج من الجسم وجد أن الرعاية لم تتم بالشكل الصحيح في كل من مستشفى عطبرة والدامر. و 68% بالنسبة لفحص تكور الرحم، البدء بالرضاعة الطبيعية وجد أنها 92%، فحص النزيف من الجرح 36%، معالجة الألم 94%، التمشي المبكر وإزالة القسطرة بعد 6 ساعات وإعطاء السوائل عن طريق الوريد وفحص حركة الأمعاء تم 100%.

**الخلاصة:** تشير نتائج الدراسة الحالية إلى وجود فجوة بين الرعاية المقدمة للنساء بعد العملية القيصرية والرعاية القياسية.

**التوصيات:** زيادة عدد الكادر التمريضي و تدريب وتقديم برامج تعليمية.

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## List of Abbreviations

<b>Abbreviations</b>	<b>Meaning</b>
BP	Pressure Blood
CS	Section Cesarean
DVT	Thrombosis Vein Deep
FBC	Count Blood Full
HR	Rate Heart
O & I	Output and intake
IV	Intravenous
LARC	Contraception Reversible Acting Long
LSCS	Section Cesarean Segment Lower
RR	Rate Respiratory
T	Temperature
VDAC	Birth Cesarean After Delivery Vaginal
VS	Signs Vital
VTE	Thromboemlism Venous
WHO	Organization Health World

# 1. Introduction

## 1.1 Introduction:

Cesarean section is a fetal delivery through an open abdominal incision (laparotomy) and an incision in the uterus (hysterotomy). The first cesarean documented occurred in 1020 AD, and since then, the procedure has evolved tremendously.<sup>[1]</sup>

Hemorrhage is the most frequent complication of the cesarean section during or after the surgical event. However, there is no consensus on the actual incidence, worldwide; it is estimated that around 75% of obstetric hemorrhages occur in cesarean section.<sup>[2]</sup>

After a cesarean delivery, the risk of a wound infection ranges from 2.5% to higher than 15%. Risk factors are similar to those noted for endomyometritis, with the lowest risk associated with those having a planned cesarean delivery. If chorioamnionitis is present at the time of the procedure, the risk for a wound infection can be as high as 20%.<sup>[3]</sup>

The incidence ranges of urinary tract infection is from 2-16%, and the process of placing an indwelling catheter for the surgery is a risk factor in itself. In a study examining the efficacy of vaginal cleansing, postoperative endometritis was reduced from 8.7% to 3.8% with cleansing. A study investigating adjunctive azithromycin saw a decrease in wound infection from 6.6% to 2.4% with the additional antibiotic.

Thromboembolic complications are also increased in patients who have undergone a cesarean delivery. Approximately 0.5-1 in 500 pregnant women experience deep venous thrombosis (DVT).The risk for developing a thrombus is increased 3- to 5-fold with a cesarean delivery and in the postpartum period.

If DVT is not treated, up to one quarter of patients will develop pulmonary emboli and 15% of these could be fatal.[3]

viously recommended a population based CS rate between 5–15%, the recent

WHO Statement on CS rates identified that CS is associated with short and long-term risks both for mothers and newborn.<sup>[4]</sup>

Proper nursing care is a main factor in preventing and treating such complication , especially when it follows the scientific approaches, and of those approaches is nursing process. Women after CS need continues assessment during hospitalization to find any problem in order to correct it as soon as possible.<sup>[5]</sup>

## **1.2 Problem statement :**

Results of studies in the UK have shown that the risk of maternal death caused by cesarean delivery is 3 times<sup>[6]</sup> In developing countries, obstetric hemorrhage alternates the first and second position with preeclampsia as a cause of maternal death<sup>[2]</sup>. One of the leading causes of maternal mortality related to cesarean delivery is deep vein thrombosis resulting in pulmonary embolism. Thromboembolic complications are also increased in patients who have undergone a cesarean delivery. Approximately 0.5-1 in 500 pregnant women experience deep venous thrombosis (DVT). The risk for developing a thrombus is increased 3- to 5-fold with a cesarean delivery and in the postpartum period. A woman who has had a cesarean delivery typically remains hospitalized longer than one who has had a vaginal delivery and has increased risk for readmission<sup>[3]</sup> Additionally, Cesarean section causes many risks for the mother and fetus as compared with normal labor such as increase risk for losing of blood, expose to infection, increase risk of tearing the female reproductive organs as urinary bladder, uterine blood vessels, risk of tearing the uterine incision, risk of maternal death post cesarean labor from complications of anesthesia, puerperal infections, and deep vein thrombosis<sup>[7]</sup>.

## **1.3 Justification:**

Women who experience a cesarean birth are at higher risk for postpartum infection, hemorrhage and thromboembolic disease so postoperative care help to detect early problem to manage it and prevent complication.

We observe that there is defect in nursing care provided to women after Cesarean Section.

## **1.4 Research objectives:**

### **1.4.1 General Objective:**

Quality of zero day nursing care after caesarean section in Atbara and Aldamer hospital.

### **1.4.2 Specific objectives:**

- To assess of general assessment and observations.
- To assess of education given to mother and family.
- To assess medication administration and pain management.
- To assess maternal nutrition.

## **2. Literature Review**

### **2.1 The postpartum period:**

The postpartum (or postnatal) period begins immediately after childbirth as the mother's body, including hormone levels and uterus size, returns to a non-pregnant state. The terms puerperium, puerperal period, or immediate postpartum period are commonly used to refer to the first six weeks following childbirth. The World Health Organization (WHO) describes the postnatal period as the most critical and yet the most neglected phase in the lives of mothers and babies; most maternal and newborn deaths. A woman giving birth in a hospital may leave as soon as she is medically stable, which can be as early as a few hours postpartum, though the average for a vaginal birth is one to two days. The average caesarean section postnatal stay is three to four days. During this time, the mother is monitored for bleeding, bowel and bladder function, and baby care. The infant's health is also monitored. Early postnatal hospital discharge is typically defined as discharge of the mother and newborn from the hospital within 48 hours of birth.<sup>[8]</sup>

### **2.2 Cesarean delivery;**

Cesarean delivery is defined as the delivery of a fetus through surgical incisions made through the abdominal wall (laparotomy) and the uterine wall (hysterotomy). In 2014, 32.2% of women who gave birth in the United States did so by cesarean delivery. The rapid increase in cesarean birth rates from 1996 to 2014 without clear evidence of concomitant decreases in maternal or neonatal morbidity or mortality raises significant concern that cesarean delivery is overused.<sup>[9]</sup>

While a caesarean section can be an essential and lifesaving surgery, it can put women and babies at unnecessary risk of short- and long-term health problems if performed when there is not medical need. Worldwide caesarean section rates have risen from around 7% in 1990 to 21% today, and are

projected to continue increasing over this current decade. If this trend continues, by 2030 the highest rates are likely to be in Eastern Asia (63%), Latin America and the Caribbean (54%), Western Asia (50%), Northern Africa (48%) Southern Europe (47%) and Australia and New Zealand (45%), the research suggests.<sup>[10]</sup>

### **2.2.1 Incidence:**

Increased from 5% in 1970 to 25% in 1990 due to: procedure as high forceps and difficult mid forceps are abandoned in favour of C.S Increased C.S delivery in breech presentation ,Destructive operations are abandoned in favour of C.S, Decreased morbidity and mortality due to C.S encourages to use and Increased repeated C.S due to increased primary C.S.

### **2.2.2 Indications:**

Maternal indications include: contracted pelvis and cephalopelvic disproportion, pelvic tumours especially if impacted in the pelvis or cancer cervix, Antepartum hemorrhage ,hypertensive disorders with pregnancy ,abnormal uterine action ,previous uterine scar as gastrectomy or hepoplasty, previous successful repair of vesco vaginal fistula, associated conditions as intrapartum hemorrhage or malpresentations. previous caesarean section if the cause of the previous section is permanent e. g contracted pelvis, Previous section was upper segment, and suspectsd week scar as evidenced by history of puerperal infection after the previous section, hysterosalpingography or hysteroscopy done after the previous section reveals adefect in the scar, Vaginal bleeding during current labour, and marked tenderness over the scar during current labour. Foetual indication: malpresentations and malposition. prolapsed pulsating cord or foetal distress befor full cervical dilatation, Diabetes mellitus, bad obstetric history as recurrent intrauterine foetul death in last week of pregnancy or repeated intranasal foetal death , postmortem C.S done within 10 minutes of maternal death to save living baby.<sup>[11]</sup> Placenta

previa : This occurs when the placenta lies low in the uterus and partially or completely covers the cervix. One in every 200 pregnant women will experience placenta previa during the third trimester . Treatment involves bed rest and frequent monitoring. If a complete or partial placenta previa has been diagnosed, a cesarean is usually necessary. If a marginal placenta previa has been diagnosed, a vaginal delivery may be an option. Placental abruption : This is the separation of the placenta from the uterine lining that usually occurs in the third trimester. Approximately 1% of pregnant women will experience placental abruption. The mother will experience bleeding from the site of the separation and pain in the uterus. This separation can interfere with oxygen getting to the baby, and depending on the severity, an emergency cesarean may be performed. and Uterine rupture : In approximately 1 in every 1,500 births, the uterus tears during pregnancy or labor. This can lead to hemorrhaging in the mother and interfere with the baby's oxygen supply. This is a reason for immediate cesarean.<sup>[12]</sup>

### **2.2.3 Contraindications:**

Dead foetus: expect in extreme degree of pelvic contraction, Neglected shoulder, sever accidental hemorrhage, Disseminated intravascular.

Coagulation: to minimize blood loss, and extensive scar or pyogenic infection in the abdominal wall e.g. in burns .<sup>[11]</sup>

### **2.2.4 Classification:**

Cesarean sections are classified according to the technique and incision used in the procedure.

#### **2.2.4.1 Classical Cesarean Section:**

A midline vertical incision on the abdomen and the uterus is made to deliver the baby. Owing to a large number of complications associated with the technique, it is hardly practiced any longer.

#### **2.2.4.2 Lower Segment Cesarean Section (LSCS):**

It is the most commonly preferred method wherein a horizontal or transverse incision is made on the lower part of the abdomen to deliver the baby. It involves less blood loss and is easier to repair than other incisions employed for the purpose. The incision also is low so cosmetically more acceptable. The LSCS can further be graded depending on when it is performed.

#### **2.2.4.3 Emergency C Section:**

When there is suspected danger to the mother's or baby's condition an emergency section is resorted to.

#### **2.2.4.4 Elective Cesarean Section (Planned C-Section):**

The Cesarean is planned and done on a specific date chosen by the patient and the doctor after assessing the maturity of the baby.<sup>[13]</sup>

#### **2.2.5 Pre-Operative:**

Before a Caesarean section, there are a number of basic steps that should be performed: Full blood count (FBC) and a Group and Save (G&S) should be taken. The average blood loss at Caesarean section is approximately 500-1000ml, depending on many factors, especially the urgency of the operation. H<sub>2</sub>-receptor antagonist should be prescribed – e.g. Ranitidine +/- metoclopramide (an anti-emetic that increases gastric emptying). Pregnant women lying flat for a Caesarean section are at risk of Mendelson's syndrome (aspiration of gastric contents into the lung), leading to a chemical pneumonitis. This is because of pressure applied by the gravid uterus on the gastric contents. A risk score for venous thromboembolism (VTE) should be calculated for each woman. Anti-thromboembolic stockings +/- low molecular weight heparin should be prescribed.

#### **2.2.6 Anaesthesia:**

The majority of Caesarean sections are performed under regional anaesthetic

– this is usually an ‘topped-up’ epidural or a spinal anaesthetic. Sometimes a general anaesthetic is required. This can be because of a maternal contraindication to regional anaesthetic, failure of regional anaesthesia to achieve the required block, or more commonly because of concerns about fetal wellbeing and the need to expedite delivery as soon as possible .

### **2.2.7 Operative Procedure:**

The woman is positioned with a left lateral tilt of 15° – to reduce the risk of supine hypotension due to aortocaval compression. An indwelling Foley’s catheter is inserted when the anaesthetic is ready, to drain the bladder and to reduce the risk of bladder injury during the procedure. The skin is then prepared using an antiseptic solution and antibiotics are administered just prior to the ‘knife to skin’ incision. There are multiple ways to perform a Caesarean, but what follows is a standard technique: Skin incision is usually with either a Pfannenstiel or Joel-Cohen – these are both transverse lower abdominal skin incisions. Sharp or blunt dissection into the abdomen is made through several layers: The skin, Camper’s fascia (superficial fatty layer of subcutaneous tissue), Scarpa’s fascia, (deep membranous layer of subcutaneous tissue), Rectus sheath, (anterior and posterior leaves laterally, that merge medially), Rectus muscle, Abdominal peritoneum (parietal) this reveals the gravid uterus.

The visceral peritoneum covering the lower segment of the uterus is then incised and pushed down to reflect the bladder, which is retracted by the Doyen retractor. Uterine incision is made on the lower uterine segment beneath the line of peritoneal reflection. This is a transverse curvilinear incision which is digitally extended. The baby is then delivered cephalic/breech with fundal pressure from the assistant. De Lee’s incision (lower vertical) may be required if the lower uterine incision is poorly formed (rare). Oxytocin 5iu is given intravenously by the anaesthetist to aid delivery of the placenta by controlled cord traction by the surgeon. The uterine cavity is

ensured empty, then closed with two layers. The rectus sheath is then closed and then the skin (either with continuous/interrupted sutures or staples).<sup>[14]</sup>

### **2.2.8 Complications:**

A primary cesarean section performed for an average-weight woman who is not in labor confers a much lower risk of complications than an emergency cesarean section performed on an obese woman who has chorioamnionitis and has been in labor for hours.<sup>[15]</sup> Postpartum endomyometritis is increased significantly in patients who have had a cesarean delivery. Major risk factors for endomyometritis include whether the cesarean delivery was the intended (primary) procedure and the socioeconomic status of the patient. Other major risk factors include duration of membrane rupture, duration of labor, number of pelvic examinations, length of time with internal fetal monitors in place, and the presence of chorioamnionitis prior to initiating cesarean delivery. Blood cultures are positive in approximately 10% of patients with postoperative febrile morbidity, and broad-spectrum antibiotics should be used.<sup>[16]</sup> Blood loss during a cesarean delivery may be greater than during a vaginal delivery however, the transfusion rate remains low at 1% to 2% of patients undergoing cesarean section. Planned cesarean deliveries have been associated with a lower risk of early postpartum hemorrhage compared with instrumental vaginal deliveries and unplanned cesarean deliveries in one population-based cohort study . Thromboembolism. One of the leading causes of maternal mortality related to cesarean delivery is deep vein thrombosis resulting in pulmonary embolism Other risk factors for thromboembolism are important to consider with cesarean delivery, as they may have additive risk for a given patient - most importantly a history of thromboembolism and another factor that is more commonly encountered, maternal obesity.<sup>[17]</sup> Uterine rupture is the most severe early complication and is defined as the complete laceration of the uterine wall including its serous layer, creating a communication between the endometrial and peritoneal cavities with gas and

blood leakage and consequent hemoperitoneum. The incidence of uterine rupture among women with at least one prior CS was 0.5% and severe CSD is an important risk factor.<sup>[6]</sup> Wound infection. Depending on risk factors and whether needed an emergency C-section, might be at increased risk of an incision infection. Surgical injury. Although rare, surgical injuries to the bladder or bowel can occur during a C-section. If there is a surgical injury during your C-section, additional surgery might be needed. Increased risks during future pregnancies. After a C-section, mother face a higher risk of potentially serious complications in a subsequent pregnancy than a vaginal delivery. More C-sections increase risks of placenta previa and a condition in which the placenta becomes abnormally attached to the wall of the uterus (placenta accreta). The risk of the uterus tearing open along the scar line from a prior C-section (uterine rupture) is also higher if mother attempt VBAC.<sup>[18]</sup>

### **2.2.9 Postoperative care:**

After surgery, the woman would be transferred by stretcher to the postanesthesia care unit. If spinal anesthesia was used, the woman's legs are fully anesthetized so she cannot move them. Pain control is a major problem after birth because it was so intense that it interfered with the woman's ability to move and deep breathe. This may lead to complications such as pneumonia or thrombophlebitis.<sup>[19]</sup> Assess maternal vital signs every 15 minutes the first hour, every 30 minutes the second hour, and hourly until she is transferred to the postpartum unit or per facility protocol. Evaluate fundal position and firmness along with vital signs. Evaluate amount and type of lochia along with vital signs.<sup>[20]</sup> If the patient had regional anesthesia, they usually receive a long-acting analgesic with the regional anesthetic. If a patient did not receive a long-acting analgesic or had general anesthesia, administer narcotics either intramuscularly (IM) or intravenously (IV), on schedule or with a basal rate supplemented with patient-controlled boluses. When the patient is tolerating liquids, administer narcotics orally as needed. When patients

recover sensation after a regional anesthetic and vital signs have been stable with minimal vaginal bleeding, they can be taken to their room. Vital signs should be taken every hour for at least the first 4 hours—again, with particular attention paid to urine output. Overall, a patient should receive approximately 3-4 L of IV fluid from the initiation of IV fluid replacement through the first 24 hours. The patient can be started on clear liquids 12-24 hours after an uncomplicated procedure, and diet can be advanced accordingly. When the patient is able to tolerate good oral intake, the IV fluids may be stopped. The bladder catheter can be removed 12-24 hours postoperatively once the patient is ambulatory. If the patient is unable to void in 6 hours, consider replacing the Foley for an additional 12-24 hours. On the first postoperative day, encourage the patient to ambulate. Increase ambulation every day as tolerated by the patient. The dressing can be removed 12-24 hours after surgery and can be left open after that time. Typically, the blood count is checked 12-24 hours after surgery, or sooner if a greater than average blood loss has occurred. If a patient plans to breastfeed, this can be initiated within a few hours after delivery. If a patient plans to bottle feed, a tight bra or breast binder should be used in the postoperative period. If the patient has recovered well postoperatively, she can be discharged safely 2-4 days after surgery. If staples were used to approximate the skin, remove them prior to discharge. If the patient has had a vertical skin incision or is at risk for poor healing (eg, from diabetes or long-term steroid use), the physician may elect to keep the staples in for 2-3 extra days and have the patient return to the office at that time. Before discharge, a discussion about contraception should take place unless the patient had immediate postpartum LARC placement. Stress that even if a mother is breastfeeding, she still can conceive. Ask patients to refrain from intercourse for 4-6 weeks postpartum postpartum.<sup>[21]</sup>

## **2.3 Previous studies:**

### **Study (1):**

Magda Ahmed Farahat, published in 2018 aim of the study: Audit on the current postoperative nursing care provided to women who had Cesarean Section at woman's health hospital, Assess the hospital based rate of Cesarean Section. Interview questionnaire and observational checklist was used to collect the data. The study found that there was significant improvement related to monitoring vital signs, palpating fundus and surgical site care, there was a big gap between the current and the ideal practices of care. The study recommended that Increasing number of nursing staff, Nurses in post natal unit should have training courses, qualified staff should be recruited, further research studies are needed.<sup>[22]</sup>

### **Study (2):**

Study was conducted in 2018 by Inaam H. Abdelati. Aim to evaluate the quality of cesarean nursing care at hospital of Mansura University, the outcomes of it preserve advance and support quality of care and women satisfaction. By using a descriptive design Data collection by, structured interviewed questionnaire, observational checklist and satisfaction assessment scale. conducted in Mansoura university hospital. Findings indicated that most of studied women had received a complete care during intraoperative & immediate post-operative 92.5% & 95.0% respectively. Meanwhile, 80.0% & 62.5% of them didn't received health education and emotional support also , the higher percentage of studied women were satisfied with general environment, cleanliness, communication and physical care 75.0%, 75.0%, 65.0% and 58.0% respectively. While, 60.0% of them were dissatisfied with continuity of care. Regarding involving in decision making, all of studied sample 100% were dissatisfied.<sup>[23]</sup>

**Study (3):**

Study was conducted in 2010 by Manal Farouk Moustafa to assess the actual post Cesarean Section Care for women in Assuit University hospital & King Fahd hospital in Gizan and their relation to the ideal nursing care. The data collected through observation check list. The study found that the percentage of post CS. Care in Assuit university hospital was 52.9% and 41.1% in King Fahd hospital in Gizan .<sup>[24]</sup>

**Study (4):**

Study was conducted in 2016 to explore nurses' practical skills post cesarean section Mansoura University Hospital conducted by AbuShabana K' Reda A ,Samia I, sally A. The data collected through An interview questionnaire schedule, Observational Checklist and Satisfaction Scale. The majority of nurses (96.2%) had correct knowledge about care provided post cesarean section. All nurses had incorrectly practiced post CS care for mothers and baby. And all mothers were not satisfied with nursing care provided post cesarean section. The study recommended that design training programs for all nurses, Establishing staff development unit at obstetrics and gynecology department in Mansoura University hospital to monitor and enhance nurses' practical skills, and Dissemination of the present study findings to obstetrics and gynecology department at Ministry of Health Hospitals and Mansoura University Hospital.<sup>[7]</sup>

**Study (5):**

Study was conducted in 2014 by Maha Ramadan Ali to determine the impact of nursing intervention for women underwent cesarean section on the occurrence of post-operative complications using evidence based approach what the impact of nursing intervention for women underwent cesarean section on the occurrence of post-operative complications in Port Said Hospitals using a quasi-experimental study the study found that

implementation of a nursing intervention for women undergoing cesarean section leads to improve the mother's level of knowledge, compliance of comprehensive care and practice .here was difference between the impacts of nursing intervention for women undergoing cesarean section on the occurrence of postoperative complications.<sup>[25]</sup>

**Study (6):**

H. M. Ahmed, B. M. Najib published in 2009 aim to determine the effect of implementing nursing process on health status of women who had cesarean birth. A quasi-experimental study was conducted in the Maternity Teaching Hospital in Erbil city, data collected through the use of one interview questionnaire and three checklists.It is concluded that nursing care according to nursing process is more effective in improving mother's health after cesarean birth than usual care, therefore implementing such type of nursing care is recommended.<sup>[26]</sup>

**Study (7):**

The study was conducted in 2011by Sandra Elisa Sell, Priscilli Carvalho Beresford, Heloisa Helena Zimmer Ribas Dias, Olga Regina Zigelli Garcia, Evanguelia Kotzias Atherino dos Santos . aim of this exploratory-descriptive study was to identify the perceptions, knowledge and actions of postpartum women and nursing staff regarding pain after cesarean section in teaching hospital in Florianópolis-SC, Brazil. Data were collected through semi-structured interviews.The results show that pain after cesarean delivery is a reality all mothers who undergo this delivery method experience, although the nursing professionals are not anonymous about it, indicating the need to invest in professional qualification on pain management, including training and recycling.<sup>[27]</sup>

### **3. Methodology**

#### **3.1 Study design:**

This study is observational study.

#### **3.2 Study area:**

This study will be conducted in Atbara and Aldamer hospitals in River Nile state.

#### **3.3 Study setting:**

Postnatal unit in both Atbara teaching hospital and Aldamer teaching hospital.

#### **3.4 Study population:**

Women who delivered by cesarean section in zero day.

#### **3.5 Sampling and sample size:**

Total covering in the period of study.

#### **3.6 Inclusion criteria:**

Women who delivered cesarean section in zero day

#### **3.7 Exclusion criteria:**

Women who didn't delivered by cesarean section and women there are no in the zero day

#### **3.8 Data collection tools:**

Observational Check list

#### **3.9 Data collection techniques:**

Interview check list.

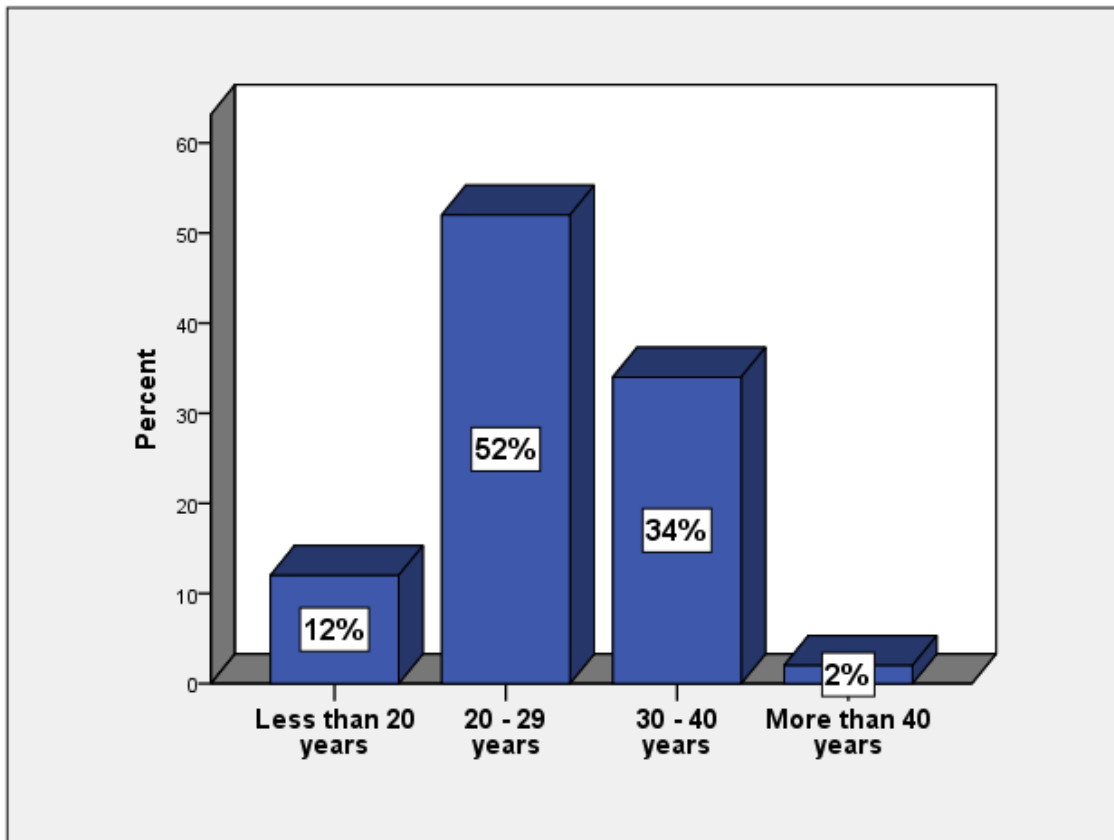
#### **3.10 Data analysis:**

The data were analyzed using statistical package of social science (SPSS).

#### **3.11 Ethical consideration:**

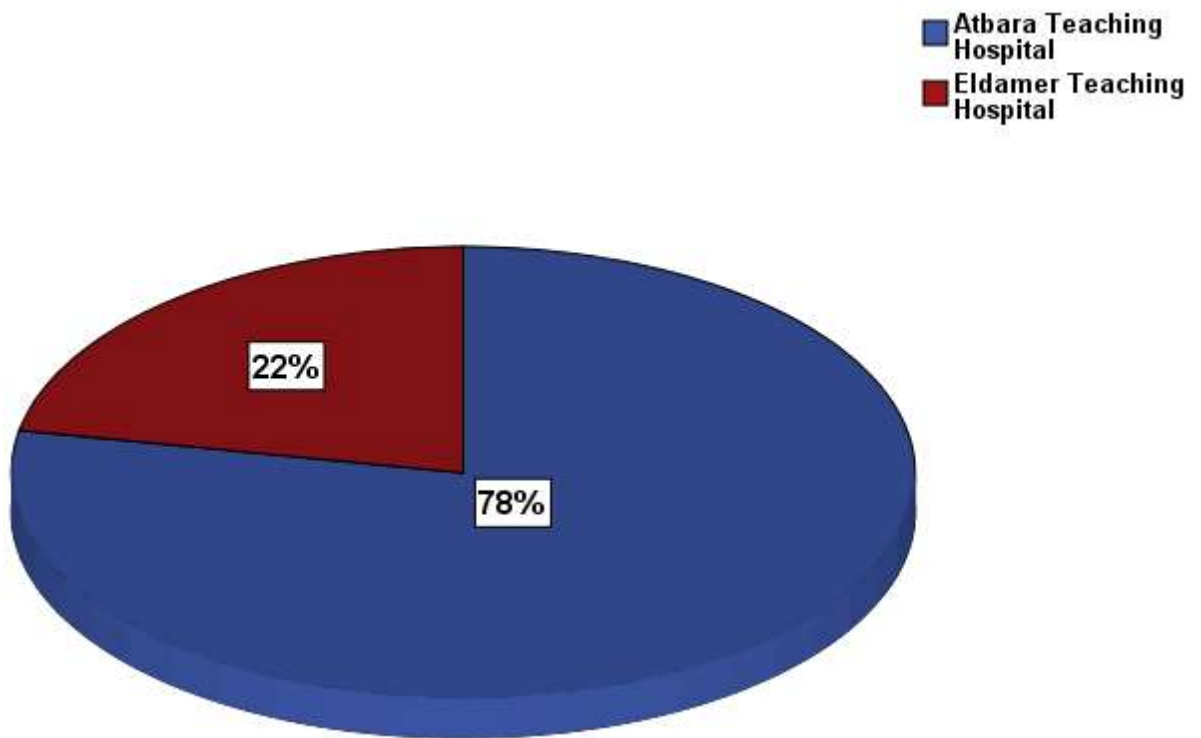
Permission from hospital was taken.

## 4. Results



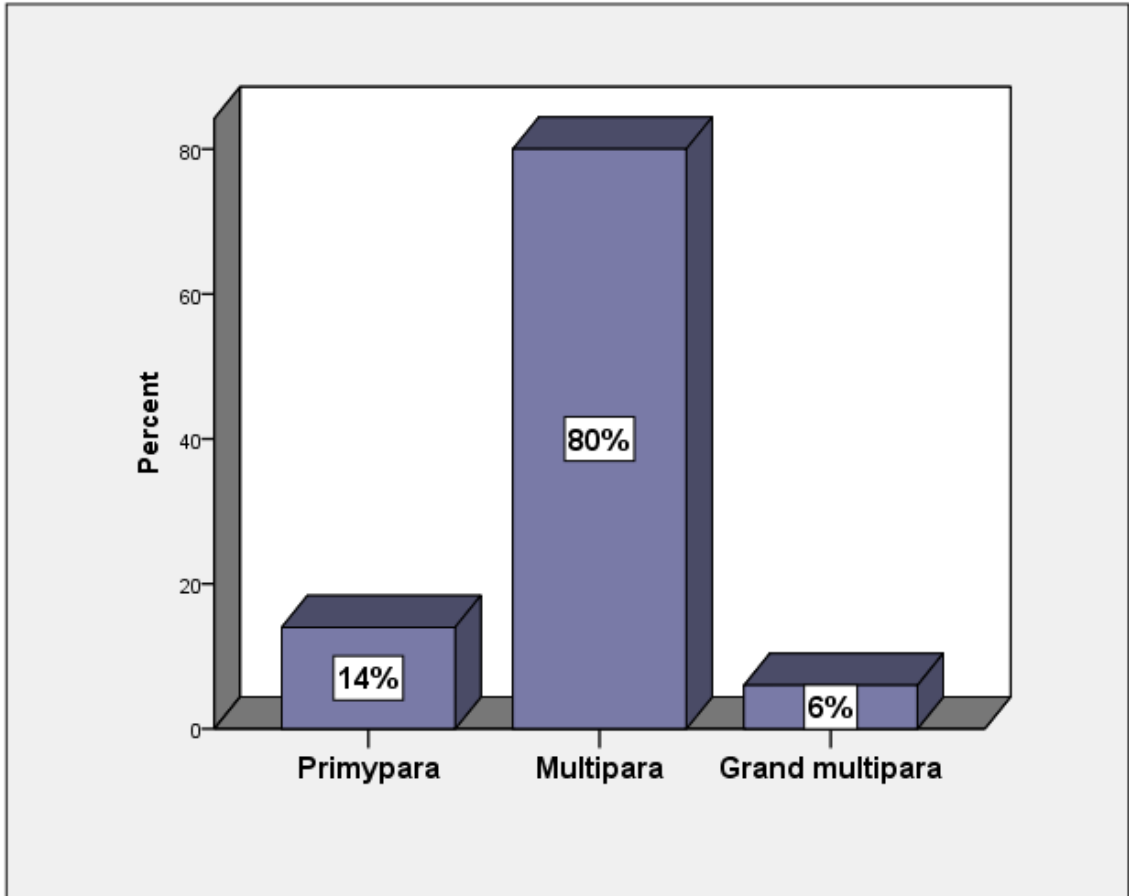
**Figure (1):** Distribution of study group according to age group

Most of mothers (52%) their age between (20 – 29) years.



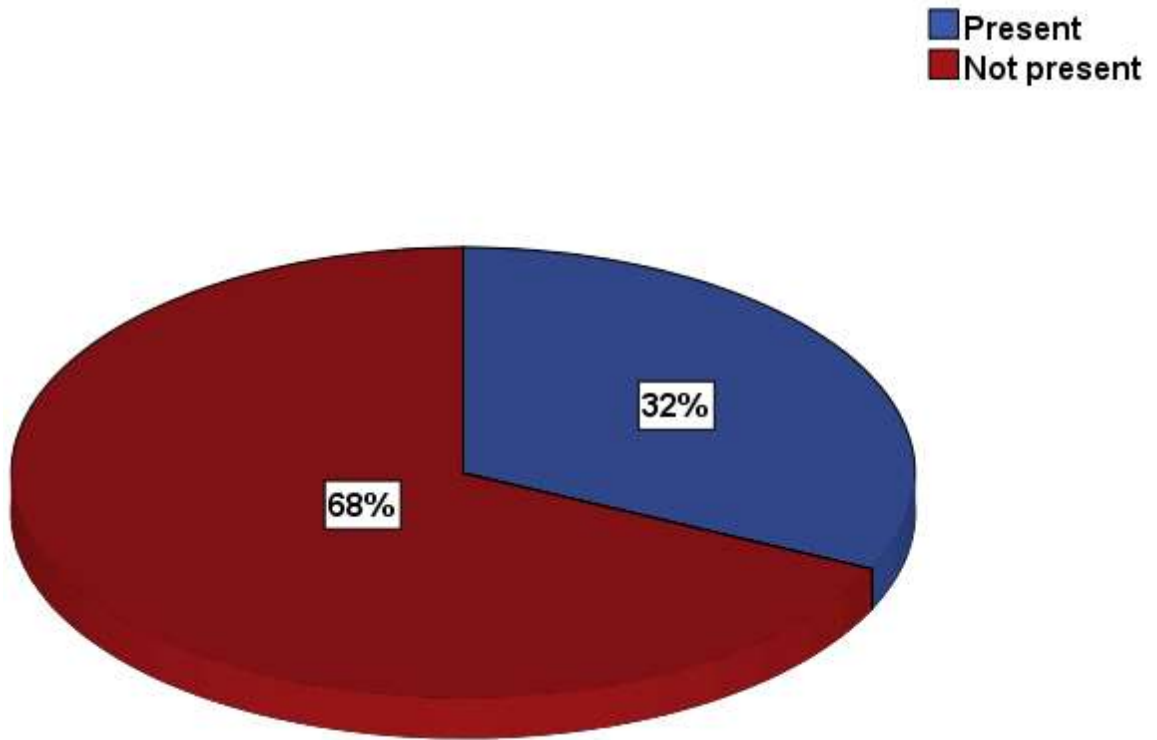
**Figure (2):** Distribution of study group according to hospital

The majority of mothers (72%) at Atbara teaching hospital.



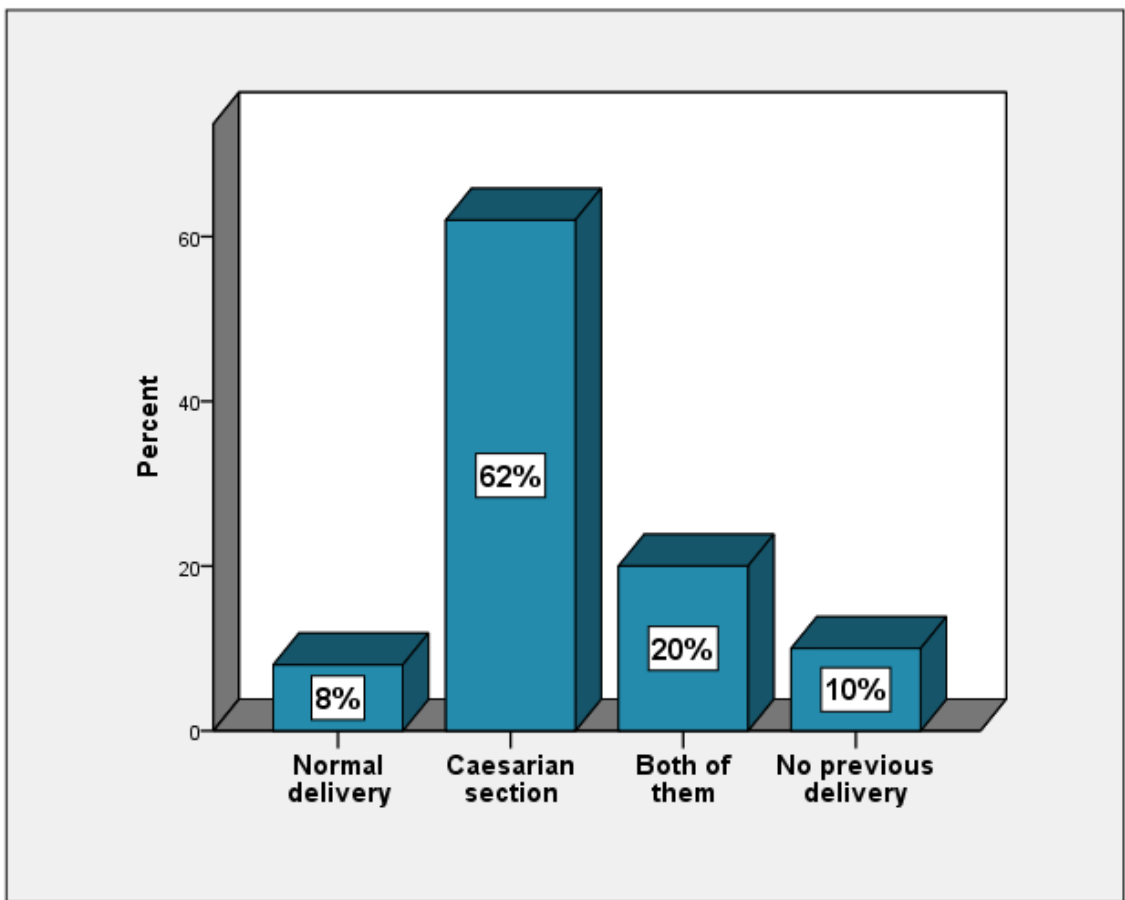
**Figure (3):** Distribution of study group according to parity

Most of mothers (80%) are multipara.



**Figure (4):** Distribution of study group according to previous abortion

The majority of mothers (68%) have not previous abortion.



**Figure (5):** Distribution of study group according to previous delivery

Most of mothers (62%) their previous delivery by caesarian section.

**Table (1):** Distribution of study group according to HR test:

Most of studied mothers Measure HR test in second hour (64%) Not done in first hour (86%)

Test	Done		Improper		Not done	
	Freq.	%	Freq.	%	Freq.	%
Every 15 minutes (1 <sup>st</sup> hour)	7	14%	0	0%	43	86%
Every 30 minutes (2 <sup>nd</sup> hour)	32	64%	0	0%	18	36%
Every 1 hour (after 3 hour)	15	30%	0	0%	35	70%
Every 4 hours (after 4 hours)	11	22%	1	2%	38	76%

**Table (2) :** Distribution of study group according to T test:

Most of studied mothers have not T test in second hour, (64%) was measured temperature improperly.

Test	Done		Improper		Not done	
	Freq.	%	Freq.	%	Freq.	%
Every 15 minutes (1 <sup>st</sup> hour)	1	2%	6	12%	43	86%
Every 30 minutes (2 <sup>nd</sup> hour)	1	2%	32	64%	17	34%
Every 1 hour (after 3 hour)	2	4%	12	24%	36	72%
Every 4 hours (after 4 hours)	2	4%	10	20%	38	76%

**Table (3):** Distribution of study group according to Bp test:

Most of studied mothers have BP test in second hour (64%)

Test	Done		Improper		Not done	
	Freq.	%	Freq.	%	Freq.	%
Every 15 minutes (1 <sup>st</sup> hour)	7	14%	0	0%	43	86%
Every 30 minutes (2 <sup>nd</sup> hour)	32	64%	0	0%	18	36%
Every 1 hour (after 3 hour)	15	30%	0	0%	35%	70%
Every 4 hours (after 4 hours)	11	22%	1	2%	38	76%

**Table (4):** Distribution of study group according to RR test:

Most of studied mothers have RR test in second hour (64%):

Test	Done		Improper		Not done	
	Freq.	%	Freq.	%	Freq.	%
Every 15 minutes (1 <sup>st</sup> hour)	7	14%	0	0%	43	86%
Every 30 minutes (2 <sup>nd</sup> hour)	32	64%	0	0%	18	36%
Every 1 hour (after 3 hour)	15	30%	0	0%	35	70%
Every 4 hours (after 4 hours)	11	22%	1	2%	38	76%

**Table (5):** Distribution of study group according to Lochia test:

Majority of studied mothers were observed for lochia in second hour (46%) and only (6%) was observed in first hour.

Test	Done		Improper		Not done	
	Freq.	%	Freq.	%	Freq.	%
Every 15 minutes (1 <sup>st</sup> hour)	3	6%	0	0%	47	94%
Every 30 minutes (2 <sup>nd</sup> hour)	23	46%	0	0%	27	54%
Every 1 hour (after 3 hour)	12	24%	0	0%	38	76%
Every 4 hours (after 4 hours)	6	12%	0	0%	44	88%

**Table (6):** Distribution of study group according to mother test:

Early ambulation, remove catheter after 6 hours, give iv fluid as ordered, and bowel function were done (100%) fundal palpation is done properly (68%), pain management and medication as ordered done properly (94%).

Test	Done		Improper		Not done	
	Freq.	%	Freq.	%	Freq.	%
Fundal palpation	34	68%	0	0%	16	32%
Check immediate bleeding from wound dressing	18	36%	1	2%	31	62%
Give IV fluids	50	100%	0	0%	0	0%
Give medication as ordered	47	94%	3	6%	0	0%
Early ambulation	50	100%	0	0%	0	0%
Remove catheter after 6 hours	50	100%	0	0%	0	0%
Bowel function	50	100%	0	0%	0	0%
Pain management	47	94%	3	6%	0	0%
Encourage early breastfeeding	46	92%	0	0%	4	8%
Monitor intake and output	2	4%	39	78%	9	18%

## 5.1 Discussion

The present study was done with the aim of Quality nursing care in zero day after caesarean section in Atbara and Aldamer hospitals. The findings of the present study in both hospital ( Atbara & Aldamer) revealed to many deficient in nursing care which provided for post C.S. women .

(Farouk 2013) mentioned that Measuring vital signs every 15,30 & every hour during 4 hours it was found that the care not done in both hospital Assuit & Gizan.<sup>[23]</sup> this results disagree with present study that observed that vital signs is done as Blood pressure respiration rate and heart rate is done accurately as every 15 minutes in first hour (14%), every 30 minutes in second hour (64%) every an hour (30%) and every 4 hours (22%).

Temperature every 15minutes in first hour (2%) every 30minutes in second hour (2%),every an hour (4%) ,and every 4 hours(4%). And about observing bleeding from the vagina, (Farouk 2013 ) revealed that care done (100 %) in both Assiut & Gizan hospital.<sup>[23]</sup> This disagree to finding of the present study that found observing bleeding from the vagina is not done according standard. It done accurately every 15 minutes in first hour (6%), every 30 minutes in second hour (64%), every an hour (24%) and every 4 hours (12%).

About remove catheter this study found it done (100%) and this results agree with (Lijun Li 2021) who stated that the duration of urinary catheter  $\geq 24$  h is the risk factors for surgical site infection. <sup>[28]</sup>

About encourage women for early ambulation it was found that done accurate (100 %) it agree with (Jyoti V Dube 2013) who concluded that the planned early ambulation is after lower segment cesarean section plays an important and beneficial role in improving the postnatal activities of post caeserean patients.<sup>[29]</sup>

The results of (Abed El-Azim 2012 ) study indicated that three quarters or more of women didn't receive uterine examination.<sup>[30]</sup> and this agree with

present study that observed that (64 %) done accurately.

As regard initiate breast feeding it was found that done ( 81%) (H. M. Ahmed 2014)<sup>[26]</sup> this similar with present study that indicate breast feeding was done (92%).

(AbuoShabana K. et. al 2016) revealed that all nurses in Mansoura University Hospital were incorrectly measuring and recording intake and output (I & O) chart for 24 hour.<sup>[24]</sup> This is agreed with present study that found intake and output (I&O) were measured improperly (74%). all nurses had incorrectly practiced procedure of wound care This disagree with the present study that observed check bleeding from wound dressing done (36%). also all nurses had correctly practiced procedure of bowel sounds This results agree with present study that observed that bowel functions is done (100%).

(Sandra Elisa Sell 2011) reported that nursing professionals are not unanimous about post-Caesarean pain, bringing about a range of pain relief conducts <sup>[26]</sup> and this results agree with present study that observed that pain management is done accurately (94%) .

(Farahat 2018) in Assuit mentioned that There was a big gap between the current and the ideal practices of care. This result agreed with the result of the present study which observed that there was defect in care. <sup>[21]</sup> Also (Inaam H. Abdelati 2018) mentioned that regarding the nursing care of postoperative, majority of studied sample had received incomplete and below standard care<sup>[22]</sup> and this results agree with present study.

(AbuoShabana K. et. al 2016) stated that all of nurses in Mansoura University Hospital incorrectly practices post caesarean section care due to lack number of nurses in one shift as well as heavy work, overload from orders of the doctor, the great amounts of admission daily, small salaries compared to the quantity of duties needed from nurses, inflexible schedules of the work in addition to shortage of supplies and equipment, all of these causes were lead

to nurses did not provide high quality of nursing care<sup>[24]</sup> and this results agree with present study that found there was defect in care provide for women after caesarian section.

## **5.2 Conclusion**

The finding of the present study indicate that there was gap between the care providing to the women after CS and standard care of post operative women.

### **5.3 Recommendations:**

- Increasing the number of the nursing staff in the post-partum ward to increase the quality of service.
- In- services education program for nurses working in postoperative ward about ideal nursing care for cesareans section.
- Providing a sufficient training for the nursing staff in the postoperative ward for care a C. S. women.
- Make check list for ideal nursing care & compromised that by actual nursing care for post cesarean section.
- Encouragement and Finance nursing staff to promote good nursing care.

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## Check list for postoperative care off caesarean section in zero day

### Demographic data:

**Age:** less than 20 ( ) 20 – 29 years ( ) 30 - 40 years ( ) more than 40 years ( )

**Parity:** primypara ( ) multipara ( ) grand multipara ( )

**Previous abortion:** Yes ( ) No ( )

**Previous delivery:** Normal delivery ( ) Cesarean section ( )

	Every 15 minutes			Every 30 minutes			Every 1 hour			Every 4 hours		
	done	improper	Not done	done	improper	Not done	done	improper	Not done	done	improper	Not done
VS												
HR												
T												
Bp												
RR												
Lochia												

	Done	Improper	Not done
Fundal palpation			
Check immediate bleeding from wound dressing			
Give IV fluids 3-4 L			
Give medication as ordered			
Early ambulation			
Remove catheter after 6 hours			
Bowel function			
Pain management			
Encourage early breast feeding			
Monitor intake and output			