

## Emergency Caesarian Section among Libyan Women at Khaddar Hospital, Tripoli, Libya

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**Abstract:** The magnitudes of Caesarean section (C-section) rates are on increase in many middle and high-income countries, with better outcomes. The main aim of this study was to review the complications of emergency caesarian section during and post operative period. The study showed that more than half of the patients (57.5%) had an emergency caesarian section and that most of emergency cases belonged to the age group 15-25 years (41.8%).

### I. Introduction

Caesarean section (C-section or C/S) rates are rising in many middle and high-income countries with the justifications that higher rates of C-section are associated with better outcomes (Belizan et al., 2007). After excluding medical disorders and severe antenatal complications, the relative risk for emergency intrapartum compared with elective caesarean is approximately 1.7: 1.0 (Rubi, 2000). Postpartum maternal morbidity associated with C-sections include, wound sepsis, post partum hemorrhage, endometritis, chest infection, septicemia, febrile morbidity, blood transfusion complications, abdominal distension and burst abdomen, prolonged catheterization and urinary tract infections. Elective caesarean may reduce the incidence of emergency caesarean that is associated with high maternal morbidity mortality (Sadia et al., 2003). In Elective C/S (El. C/S), mother is well prepared preoperatively and all criteria for surgery are tried to meet with availability of trained staff and both maternal and fetal complications are undoubtedly less (Naz and Bagum, 2005). In Emergency C/S, there is lack of facilities to meet all the criteria of surgery. The procedure has to be done in deficient circumstances and elective C/S adversely affects the outcome. Both maternal and fetal complication is understandably more common in emergency cases (Tighe and Sweezy, 1990; Buclin et al., 2005 and Datta et al., 2005).

The aim of the present study is to review the complications of emergency cesarian section during and post operative period and epidemiological and obstetric factors which could be associated with such morbidity.

### II. Material And Methods

A cross-sectional and comprehensive study included all 511 Libyan women, who are admitted and operated on C/S were studied at al-khaddar hospital, Tripoli Libya during the period from November 2009 March 2010. Data was collected from the medical records of the patients. Demographic and medical variables such as age, parity, previous history of caesarian section. Morbidity, conditions as pyrexia, wound infections, peritonitis, endometritis, paralytic ileus, hemorrhage and urinary tract infection were examined and analyzed.

### III. Results

The present study showed that more than half of the patients were in emergency group (57.5%), while the elective constitute to 42.5% as in Fig.(1).

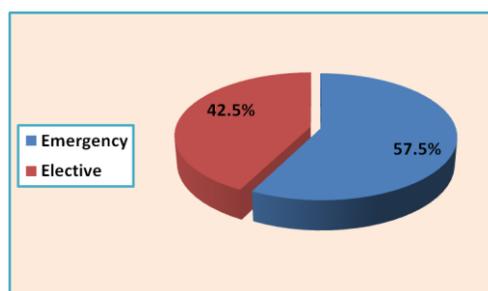


Fig. (1): Distribution of mothers according to type of C/S.

It is clear as presented in table (1) that most of emergency cases belonged to the age group 15-25 years (41.8%) and in elective, the age groups of 26-35 years constitute to 40.6%. The difference in age distribution of both type was statistically significant, (p value=0.026).

**Table (1): Distribution of patients according to type of C/S and age**

Age group	Type of Caesarian section				Total	
	Emergency		Elective			
	No.	%	No.	%	No.	%
15 – 25	123	41.8	73	33.6	196	38.4
26 – 35	86	29.3	88	40.6	174	34
36 – 45	85	28.9	56	25.8	141	27.6
<b>Total</b>	294	100	217	100	511	100

$X^2 = 7.306$  df=3; p=0.026 (Significant).

Table (2) shows the type of C/S as contrasted with the gravidity of the pregnant mothers.

**Table (2): Distribution of patients according to type of C/S and gravidity.**

Gravidity	Type of C/S				Total	
	Emergency		Elective			
	No.	%	No.	%	No.	%
Primigravida	98	33.3	69	31.8	167	32.7
2 -4	91	30.9	73	33.6	164	32.1
5 – 7	37	12.6	36	16.6	73	14.3
8 – 10	39	13.3	25	11.5	64	12.5
≥11	29	9.9	14	6.5	43	8.4
<b>Total</b>	294	100	217	100	511	100

$X^2 = 3.804$  df= 4; p=0.433 (Not Significant).

Table (3) presenting the pregnant mothers with and without past history of caesarean section operations. At last table (4) shows the types of morbidity of the pregnant mothers have both types of C/S.

**Table (3): Distribution of patients according to type of C/S and history of previous C/S**

Past history of C/S.	Type of C/S				Total	
	Emergency		Elective			
	No.	%	No.	%	No.	%
<b>Yes</b>	132	44.9	119	54.8	251	49.1
<b>No</b>	162	55.1	98	45.2	260	50.9
<b>Total</b>	294	100	217	100	511	100

$X^2 = 4.937$ . df=1; p=0.026 (Significant).

**Table (4): Distribution of patients according to type of C/S and type of morbidity.**

Morbidity	Type of C/S				Total	
	Emergency		Elective			
	No.	%	No.	%	No.	%
<b>No complication</b>	156	53.1	164	75.6	320	62.6
<b>Pyrexia</b>	57	19.4	29	13.4	86	16.8
<b>Wound infection</b>	75	25.5	23	10.6	98	19.2
<b>Others*</b>	6	2	1	0.4	7	1.4
<b>Total</b>	294	100	217	100	511	100

$X = 29.548$ . df= 3 ; p=0.000 (Highly Significant).

\*(Emergency C. section included 2 cases of UTI , 2 cases of endometritis and 2 cases of postpartum bleeding ,elective C section included 1 case of UTI ) .

#### IV. Discussion

The present study showed that more than half of the patients were in emergency group (57.5%) as it presented by fig.(1), while the elective constitute to 42.5%. Looking at table (1), it is clear that most of emergency cases belonged to the age group 15-25 years (41.8%) and in elective the age group of 26-35 years constitute to 40.6%. The difference in age distribution of both type was statistically significant, (p value=0.026). Comparing these results with other study shows the relationship between age of the patient and the type of C/S. Overall 257 (28.6%) cases of emergency C/S were carried out in the younger age groups (<25 years) as compared with 188 (21.0%) in older patients (35 years) (Sadia et al., 2003). On the other hand, only 69 (13.1%) elective C/S were performed in the younger patients (<25 years), as compared with 136 (25.7%) in the older patients (>35 years) (Lulu et al., 1996).

In table (2) it is obvious that Primi-gravidae constitute 33.3% in emergency and 31.8% in elective group of mothers, also the (2-4), (5-7), (8-10) &  $\geq 11$  gravidity were similar in both groups and p value = 0.433 with no significant difference between the two group in distribution of gravidity. Similar results of other study had a majority of women were multipara as compared to primipara (Asifa et al., 2012).

History of previous C/S, as seen in table (3), was positive in 44.9% in emergency group of mothers and 54.8% in elective ones and this difference was statistically significant. This result was similar to other study with 69.5% of elective C/S and no history of previous C/S in elective (Lulu et al 1996).

Morbidity in emergency C/S was higher than elective 46.9% versus 24.4% and this difference was statistically significant,  $p=0.0001$  highly. Types of complication was significantly different between the two group, (p value =0.0001). Pyrexia was 19.4% in emergency and 13.4% in elective, wound infection 25.5% versus 10.6%, in emergency 2 cases of UTI, 2 cases of endometritis and 2 cases of postpartum bleeding, elective C/S included 1 case of UTI were recorded. Similar finding in other studies were complication was more in emergency than elective (Mehnaz et al.,2007) While in other study they did not found significant difference in the distribution of different types of postoperative complication in both groups (Dimitrova et al., 2005).

## V. Conclusions

Cesarean section is characterized with morbidity even if performed as planned procedure. The risk of complication in cases of emergency was higher than planned C/S. Patients that demand C/S without medical indications have to be informed and be aware of these facts.

## VI. Recommendations

- 1) More improvement to the antenatal care for mothers needed.
- 2) Nationwide more comprehensive studies are necessary.

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