# Elective Versus Emergency Caesarean Section

*Thesis*

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بسم الله الرحمن الرحيم

# قالوا

سبحانك لا علم لنا
إلا ما علمتنا إنك أنت
العليم الحكيم

صدق الله العظيم

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# List of Abbreviations

**ACOG** : American college of obstetric and gynecology.

**AD** : Anno domini.

**BC** : Before christ.

**BMI** : Body mass index.

**C.S** : Caesarean section.

**CDMR** : Cesarean delivery on maternal request.

**CPD** : Cephalopelvic disproportion.

**CTG** : Cardio-tocography.

**DIC** : Disseminated intravascular coagulation.

**DVT** : Deep venous thrombosis.

**FHR** : fetal heart rate.

**HIE** : Hypoxic ischemic encephalopathy.

**HIV** : Human immune deficiency virus.

**ICU** : Intensive care unit.

**LBW** : Low-birth-weight.

**LMWH** : Low molecular weight heparin.

**NICE** :National institute for clinical excellence.

**NICU** : Neonatal intensive care unit.

**PROM** : Prelabor rupture of membrance.

**RCOG** : Royal college of obstetricians and gynaecologists.

**RCT** : Randomized controlled trial

**RDS** : Respiratory distress syndrome.

**SMD** : Standard mean deviation.

**TNN** : Transient tachypnea of the newborn.

**TOL** : Trial of labour.

**VBAC** :Vaginal birth after caesarean section.

**VD** :Vaginal delivery.

**WHO** :World health organization.

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# Introduction

Delivery of the baby by an abdominal and uterine incision is known as CS. It is increasingly being used for safe delivery, for fetal and maternal reasons either elective or as an emergency. It is done after the age of viability.

A similar operation performed before the age of viability is called hysterotomy. Over the years anaesthesia has become safer, complications are extremely rare due to availability of experienced anesthetist and most CS is being performed under regional anaesthesia. The increased safety of blood transfusion, improved aseptic, antiseptic techniques and the use of antibiotics has made it a safe procedure .The incidence of CS varies between10 and25% in most developed countries.

Worldwide increase in CS rate has become an international public health concern. The rates have increased from 5-7% in 1970 to 25-30% in 2003 **(Christilaw, 2006).**

There is a large variation in the rates of cesarean, both in high and low income countries, as well as between different institutions within these countries **(Althabe et al, 2006).**

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)**

Concern about the rising rate of CS is based predominantly on an increase in maternal mortality and morbidity compared to vaginal delivery (VD), consequences for subsequent pregnancies and deliveries, neonatal respiratory morbidity, and cost implications **(Penn et al., 2001).**

Caesarean section in developing countries is associated with significant increases in maternal morbidity particularly following elective cesarean section **(Oladapo et al., 2007)** and caesarean section without medical indications increases in infant morbidity and mortality in developing countries **(MacDorman et al., 2006).**

However, in low income countries, very low cesarean rates (less than 1%) have been associated with higher maternal and infant mortality linked to the inability to perform a caesarean section when needed **(Ronsmans et al., 2006).**

The principle indications for C.S delivery: dystocia, suspected fetal compromise, mal presentation, prior C.S and others: placental disorders, multi fetal gestation, maternal medical/ physiological conditions **(Department of Health, Western Australia, 2002).**

These medical indications changed over time according to their frequency as, in 1980s the most frequent indication for cesarean section was fetal distress (14.35%) followed by cephalopelvic disproportion (13.99%) and mal position (13.99%). In 2001 fetal distress was still most frequent (18.57%) but followed by pregnant woman diseases (14.07%) and mal position (12.45%). Placenta previa decreased from 2.49% to 0.57% and cephalopelvic disproportion decreased from 13.99% to 8.76% **(Krychowska et al., 2004).**

Maternal request for CS has also been widely documented. According to a recent estimate between 4% and 11% of caesarean deliveries worldwide are performed following maternal request in the absence of medical indication **(National Institutes of Health, 2006).**

Studies found that long labour and excessive bleeding around delivery didn't increase the likelihood of having a caesarean section **(Khawaja et al., 2004).**

Interventions aimed at reducing high caesarean rates and inappropriate caesarean practices have involved external cephalic version for breech presentation **(Hofmeyr et al., 2000),** encouraging vaginal birth after CS **(Liang et al., 2004),** limitation of induction of labour before 41 weeks of gestation **(St. Luke's, 2007),** counseling of the mother who requests a CS

in the absence of an identifiable reason **(RCOG, Clinical Guideline, 2004).**

A mandatory second opinion for non emergency caesarean section could also prevent 22 caesarean sections for every 1,000 women in labour without harmful effects to the baby or the mother, the physician had to obtain a second opinion from another physician of equal or higher clinical status. The consulting physician applied evidence-based guidelines and discussed the case with the attending physician, who made the final decision **(Villar et al., 2004).**

# Aim of the Work

To compare the rate of complications encountered between patients of elective caesarean section and patients for whom emergency caesarean section was performed.