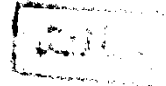


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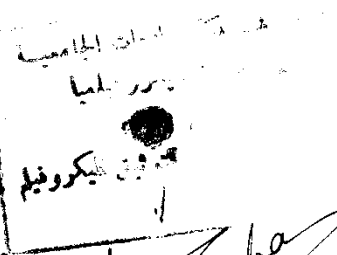


**STUDY OF MATERNAL AND PERINATAL
MORTALITY IN AIN SHAMS MATERNITY
HOSPITAL DURING A SEVEN YEARS
PERIOD (1988 - 1994)**

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A THESIS

Submitted in Partial Fulfillment
for Master Degree
of Obstetrics and Gynaecology



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1996







قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا
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سُبْحَانَ اللَّهِ الْعَلِيِّ
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LIST OF ABBREVIATIONS

AMA	:	American Medical Association.
APH	:	Antepartum Haemorrhage.
CDC	:	Center For Disease Control.
FIH	:	Family Health International.
FIGO	:	International Federation of Gynaecology and Obstetrics.
HDP	:	Hypertensive Disorders of Pregnancy.
ICD	:	International Classification Of Diseases.
IUCs	:	Intrauterine Contraceptives
MCH	:	Maternal and Child Health.
MMR	:	Maternal Mortality Rate.
NAS	:	National Academy of Science.
NCIIS	:	National Center of Health Statistics.
NIC	:	Neonatal intensive care.
PPII	:	Postpartum Haemorrhage.
TABs	:	Traditional Birth Attendants.
USA	:	United States of American.
WHO	:	World Health Organization.

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INTRODUCTION

INTRODUCTION

The goal of "Health for all by the year 2000", as put forward by WHO, challenges governments, private organisations, all health professionals and every community. As part of the global strategies for achieving "health for all by the year 2000" member states of WHO are committed to extending the coverage of essential health care to all people of the world (*WHO, 1985*).

Maternal mortality is a glaring case of gender discrimination and deserves the designation of the health scandal of our time. Although maternal deaths have become very rare events in industrialized countries, they are still a major cause of death for women of childbearing age in developing countries. The World Health Organization has recently estimated the over 500000 women continue to die each year from causes related to pregnancy and childbirth. A recent World Bank report ranked maternity as the number one health problem in young adult women (age 15-44) in developing countries, accounting for 18% of the total disease burden (*Fathala, 1994*).

At the end of the twentieth century, only about 55% of women in developing countries are enjoying the simple privilege of having a trained birth attendant at delivery (*Fathala, 1994*).

The study of maternal mortality is important in evaluating the quality of obstetric services, training clinicians who care for pregnant women and improving the safety of childbearing (*Kaunitz et al., 1985*).

Maternal death is defined as "death of any woman while pregnant or within 42 days of termination of pregnancy irrespective of the duration and site of pregnancy, from any cause related to or aggravated by the pregnancy or its management. The American Medical Association (A.M.A) extend the post partum period to 90 days in its definition while Maternal Mortality Collaborative of the American College of Obstetricians and Gynaecologists considered deaths occurring up to one year after termination of pregnancy as maternal (*Rochat et al., 1988*).

One of the widest health disparities between rich and poor is in maternal mortality. An over all maternal mortality of 400/100.000 prevails in the developing world, ranging up to 1500/100.000 in some subsaharan regions, compared with mortalities in Western Europe as low as 6/100.000 (*Barns, 1991*). Maternal mortality is one of the great neglected problems of health care in developing countries, the world health organization (W.H.O) estimates that approximately 500.000 women die each year from pregnancy related causes, over 99% of these deaths occurring in the developing world, where maternal mortality is as much as 100-200 times higher than rates seen in industrialized countries (*Duely, 1992*).

Measuring maternal mortality is extremely difficult. Different approaches have varying degrees of success and each method has advantages and short comings. These approaches are either :

Community surveys.

Which include household method, sisterhood method, network method, widower method.

Reproductive age mortality surveys. hospital surveys.

A hospital maternal mortality rate (MMR) is the number of maternal deaths taking place in the hospital divided by the number of the live births taking place in the same institution during the same period of time. Maternal deaths used to be expressed per 1000 live births, but later this was altered to be expressed per 100 000 or 1000 000 total births including still births (*Rochat, 1980*). A hospital MMRs are not good indicators of the general risk of maternal death in developing countries. One reason is that most births does not take place in hospitals, on the other hand because women who experience serious complications during delivery are more likely to try to reach hospital, hospital M.M.Rs are sometimes much higher than rate in the population at large.

In general the fewer the births take place in hospital the greater the discrepancy between the true usually unknown population rate and the hospital rate. Nonetheless, valuable information can be obtained from hospital studies which can shed light on avoidable factors especially those in hospital, and suggest specific intervention (*Royston and AbouZahr, 1992*).

Maternal mortality is the culmination of a series of detrimental events in a woman's life, pregnancy being the last one. The underlying pathology is lack of education sanitation, accessible health care, as well as poor nutrition and poverty. These affect women during pregnancy and child birth when they are more vulnerable (*Stokoe, 1991*). There are many other risk factor which can contribute to maternal deaths. In respect to maternal age, mortality rate rise steeply with increasing maternal age. High parity adds to the risk of maternal deaths. Other risk factors, health status

before pregnancy cultural and socioeconomic factors, lack of perinatal care, place of delivery and untrained birth attendant (*McCarthy and Maine, 1992*).

The causes of maternal mortality can be classified into :

Direct obstetrical causes:

Which result from complications of pregnancy, labour, puerperium or its management.

Indirect obstetrical causes:

Which result from pre existing medical conditions that are exacerbated by pregnancy.

Non obstetrical causes:

Which result from disorders incidental to and not aggravated by pregnancy such as homicide (*Mertz et al., 1992*).

The WHO suggested that no new or costly technologies are needed, rather than appropriate priority setting and allocation of needed resources are essential to the solution of the problem (*Rosenfield, 1992*). The obstetricians all over the world have social responsibility to maintain the momentum of the safe motherhood initiative and decreasing the maternal mortality.

Perinatal mortality, a very sensitive index of the adequacy and type of obstetric care during pregnancy, labour and early puerperium is very high in developing and under-developed countries. It is defined as mortality in foetuses weighing 1.000g after 28 weeks of pregnancy who die at birth, before delivery or before the end of the first week of life

(some countries consider 500g and above the criterion for weight). The mortality rate denotes perinatal deaths per 1.000 births. (*Ashar 1988*).

Perinatal mortality remains high in most of the developing countries and contributes to almost half of the infant mortality. Infants continue to die at a high rate during the first month of life, due to factors which have their origin in pregnancy or at the time of delivery (*WHO, 1984*). Inadequate availability and utilization of facilities, failure to recognize at-risk pregnancies and delayed referral are some of the adverse factors responsible for high perinatal mortality and morbidity (*Singh M.; Mir N.A., 1987*).

Attention in the last three decades has turned more and more to the preservation of life and well-being of the child, both before and after birth (*Browne and Dixon, 1980*). Fortunately today and owing to the advances made in obstetrics, while still giving full regard to the welfare of the mother, it is now feasible to consider the well being of the foetus as a very particular responsibility. It is rarely if ever necessary to think in terms of sacrificing the normal foetus to save the mother (*Percival, 1980*).

The perinatal interval is the span of foetal and neonatal life. It is an important concept, because many of the stresses and hazards, that affect the foetus have either a direct or an indirect affect in the neonatal period (*Pernoll, 1982*). Accordingly, the attention only to the product of conception at birth may be hazardous and unwarranted.

Systematic regional perinatal mortality surveys are to be instituted by 1991, and the place of confidential enquiry into some categories of perinatal death is to be considered (*Chalmers, 1989*).

AIM OF THE WORK