Prevalence of stillbirths and their associated risk factors at Ain Shams University Maternity Hospital in the period from 2008 to 2012

Thesis

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LIST OF ABBREVIATIONS

Abbreviation	Definition
AAP	American Academy of Pediatrics
ACOG	American College of Obstetricians and Gynecologists
ANC	Ante-Natal Care
APLA	Anti-phospholipid antibody syndrome
ASES	Average Socio-Economic Status
BOH	Bad Obstetric History
CDC	Center for Disease Control and Prevention
CS	Cesarean Sections
CFMF	Congenital Fetal Malformations
CMV	Cytomegalovirus
DVT	Deep Venous Thrombosis
DIC	Disseminated Intravascular Coagulation
DKA	Diabetic ketoacidosis
DM	Diabetes Mellitus
ELBW	extremely low birth weight
GDM	Gestational Diabetes Mellitus
GIT	Gastrointestinal tract
HTN	Hypertension
IMR	Infant Mortality Rate
IUFD	Intra Uterine Fetal Death
IUGR	Intra Uterine Growth Retardation
LBW	Low Birth Weight
LSES	Low Socio-Economic Status
MSL	Meconium Stained Liquor
NCHS	National Center for Health Statistics

NICU	Neonatal Intensive Care Unit
NM	Neonatal mortality
NMR	Neonatal Mortality Rate
PE	Preeclampsia
PIH	Pregnancy Induced Hypertension
PM	Perinatal Mortality
PMR	Perinatal Mortality Rate
PROM	Premature Rupture Of Membranes
PTL	Pre-Term Labour
SGA	Small for Gestational Age
SES	Socio-Economic Status
SLE	Systemic Lupus Erythromatosis
SVD	Spontaneous Vaginal Delivery
SB	Stillbirth
SIDS	Sudden Infant Death Syndrome
TOP	Termination Of Pregnancy
TRAP	Twin Reverse Arterial Perfusion
UN	United Nation
US	Ultrasonography
UTI	Urinary Tract Infection
WHO	World Health Organization

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Prevalence of stillbirths and their associated risk factors at Ain Shams University Maternity Hospital in the period from 2008 to 2012

By

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Abstract

Background: Stillbirth is an important public health concern and its rate indicates the sanitary development of society. Counting stillbirths is the first step in analysis and prevention. For public health prospective, there is a need for information, associated conditions and underlying causes of stillbirths. This information will guide efforts to prevent stillbirths and improve quality of care. Screening and monitoring in pregnancy are strategies used by health care providers to identify high risk pregnancies. Theoretically, appropriate management of maternal and fetal risk factors and complications that are detected in pregnancy and labour could prevent a large proportion of the world stillbirths, as well as minimize maternal and neonatal morbidity and mortality.

Objective: The aim of this study is to determine the prevalence of stillbirths and its associated causes and risk factors to provide recommendations for appropriate diagnosis and timely intervention.

Design: A retrospective cohort study of all stillbirth cases.

Sitting: Ain Shams University Maternity Hospital.

Timing: The documented cases of stillbirth in the period from 2008 to 2012.

Methods: Data was collected from the patient's admission records and files in the hospital archive after taking permission from the ethical committee of obstetrical and gynecological department to determine maternal history and characteristics and fetal characteristics of all stillbirth cases.

Abstract

Results: The total deliveries during the study period was 58167 cases, the total number of stillbirth was 1398 cases. The prevalence of still birth in this period was 2.4%. The highest number of stillbirth was 310 cases in 2008 and the lowest number was 218 cases in 2012. The percentage of spontaneous SVD with stillbirth cases is higher 78.97% than CS 21.03%. High prevalence of stillbirth in PG women 47.78% compared to different other categories. 24.96 % of the mothers having a bad obstetric history in the previous pregnancy. 21.6% of stillbirths having CFMF. 76.68% of mothers having maternal medical diseases. 26.75% having maternal diabetes mellitus. 30.90% was hypertensive mothers. 24.64% of mothers having previous history of stillbirth. 25.54% was unexplained stillbirth.

Conclusion: Stillbirth is one of the most stressful life events. Stillbirth is a multifactorial problem has many risk factors**.** Despite a global progress in diagnostic tools and investigations of stillbirth, there are many unknown causes of stillbirth especially on the molecular and genetic levels.

Keywords: stillbirth, risk factors, perinatal mortality, maternal diseases, obstetric complications.

INTRODUCTION

Stillbirth refers to all pregnancy losses after 22 weeks of gestation, but for numerical comparisons between international data, the ***WHO definition*** of a birth weight of at least 1000 g or a gestational age of at least 28 weeks (third-trimester stillbirth).

Millions of stillbirths occur uncounted each year and are not reflected in global policy. Until now, UN data collection systems have not included stillbirth. Global policy targets, such as the Millennium Development Goals (MDGs), omit stillbirths, as does the Global Burden of Disease. In an era of global efforts for maternal health, a woman's own aspiration of a live baby is missing from the world's health agenda.

(Frøen et al., 2011)

In society, stillbirths are also hidden. Even in high-income countries, recognition of a parent's grief after a stillbirth is recent. In low-income countries, bereavement rituals for a stillbirth are a rarity and are not recognized by society.

Results from a large, web-based survey of health-care professionals and parents in 135 countries showed that most stillborn babies are disposed without recognition or rituals, such as naming, funeral rites, or the mother holding or dressing the baby. ***(Frøen et al., 2011)***

Introduction

A widespread belief is that stillbirth represents a natural selection of babies never meant to live. Almost a third of stillbirths are almost always blamed on the woman or on evil spirits. Efforts are needed to overcome this fatalism, lessen the stigma associated with stillbirth, and provide bereavement support. Stigma and blame add to, and prolong parents' grief. The silence surrounding stillbirths hides the problem and impedes investment.

Stillbirths do count for families, and society. Effective policies and program action rely on more public and individual recognition of stillbirth. UN agencies and existing reports hardly mention stillbirth. Not one professional organization takes responsibility for stillbirth reduction, and yet midwives and obstetricians have a crucial part to play. Knowledge of stillbirth numbers and causes as well as feasible solutions is a key to designing effective policies and programs. ***(Frøen et al., 2011)***

At least 2.6 million third-trimester stillbirths occur every year, 98% in low-income and middle-income countries**.** Nigeria and Pakistan have the highest stillbirth rates (42 and 46 per 1000 births, respectively) and Finland and Singapore the lowest (two per 1000 births).Worldwide, 1.2 million stillbirths occur during labour (intrapartum). ***(Lawn et al., 2011)***.

The risk of intrapartum stillbirth for an African woman is 24 times higher than for a woman in a high-