www.jmscr.igmpublication.org
Impact Factor (SJIF): 6.379
Index Copernicus Value: 71.58
ISSN (e)-2347-176x ISSN (p) 2455-0450
crossref DOI: https://dx.doi.org/10.18535/jmscr/v6i6.27

IGM Publication
Journal Of Medical Science And Clinical Research
An Official Publication Of IGM Publication

Incidence of and Causes of Stillbirth: A Retrospective Study

Authors
Dr Huma Nishat[1], Dr Pushpa Roy[2], Dr Ismat Khanam[3], Dr Sushma Singh[4]
[1]Assistant Professor, Deptt of Obs & Gynae, IGIMS, Patna
[2]Professor, Deptt of Obs & Gynae, VIMS, Pawapuri
[3]Assistant Professor, Deptt of Obs & Gynae, VIMS, Pawapuri
[4]Assistant Professor, Deptt of Obs & Gynae, VIMS, Pawapuri

Abstract
To assess the incidence of and causes of stillbirth at VIMS Pawapuri. A retrospective study was done from February 2015 to January 2016.All the patients delivered at this hospital during this period were included. Total birth that took place were 7494 and total stillbirth were 162. This study suggest that a through upgradation of healthcare delivery system is necessary.

Introduction

Stillbirth is one of the most common adverse outcome of pregnancy. There is a traumatic experience for mother and obstetrician alike. The term stillbirth, stillborn, fetal death and fetal demise all refer to the delivery of a fetus showing no sign of life. The term are used interchangeably, but term stillbirth is prefered.

The definition recommended by WHO for international comparison is a baby born with no signs of life at or after 28 weeks gestation. In calculating the stillbirth rate, the number of stillbirths is divided by the no: of live births and stillbirths and then multiplied by 1000. India has achieved the dubious distinction of topping 195 countries with the highest no: of stillbirth in 2015 because of its huge population.

In world, there were 2.6 million stillbirth in 2015, India reported the maximum no: of stillbirth at 592000.[1] Stillbirth rate is 22/ 1000 birth in 2015. There exists no standard international classification system that defines causes of fetal death.

Stillbirth that occur more than 12-24 hours prior to delivery result in maceration of skin ,while those occuring in the intrapartum period or immediately prior to delivery are generally normal in appearance are often called fresh stillbirth.

A stillbirth is the birth of a newborn after 28th completed week (weighing 1000gm or more) when the baby does not breathe or show any sign of life after delivery.[2]

Stillbirth are subclassified as antepartum and intrapartum.

In the past decade 2.6 million stillbirth occurs each year worldwide.

India having highest number estimated at 5,92,090 in 2015. The stillbirth rate is 22/1000 birth in India, whereas worldwide it is 18.4. Indian government has adopted a target of < 10 stillbirth/1000 birth by 2030 through the india newborn action plan(INAP).[4,5]

This figure is underestimated.

The study of specific causes of stillbirth has been hindered by the lack of a uniform protocol for evaluating and classifying stillbirth and from declining autopsy rate.

The most useful information about the specific causes of stillbirth comes from hospitals or regions that systematically review and classify these death over time.

A system for classifying specific causes of stillbirth serves many purposes, for example, parents obviously want to know why there baby died and whether they are at an increased risk for similar losses in the future.

Researchers want to understand the pathogenic mechanism for stillbirth so they can develop prevention strategies.

Causes

- Birth asphyxia and trauma
- Pregnancy complication(placental abruption, pre-eclampsia, DM)
- Fetal congenital malformation and chromosomal anomalies
- Infection
- Cause unknown
- Hydrops Fetalis

Risk Factors

- Biologic Marker
- Race and socioeconomic factors
- Intimate partner violence
- Advanced maternal age
- Obesity
- Multiple gestation
- Smoking and illicit drug use
- Maternal medical disorders
- Past obstetrical history[6]

Material and Method

This retrospective study was conducted in the department of obstetrics and gynaecology, VIMS, Pawapuri (Sadar hospital, Bihar sharief) from february 2015 to January 2016.

Aims and Objective

1- To study the incidence
2- To study common causes of stillbirth

All women delivering in hospital were included. Women that had fetal death at admission i.e absence of fetal heart sound were also included. Women who were referred from various hospital to VIMS pawapuri were also included. Data was collected from record books of labour room, operation theatre and hospital records

To find out the possible causes of stillbirth, maternal details like: age, parity, socioeconomic status, gestational age, associated, medical disorder were noted.

The gestational age was assessed from LMP and clinical examination of the baby. The cut off point of gestational age was taken as 28 weeks.

Results

Data from FEB2015- JAN2016

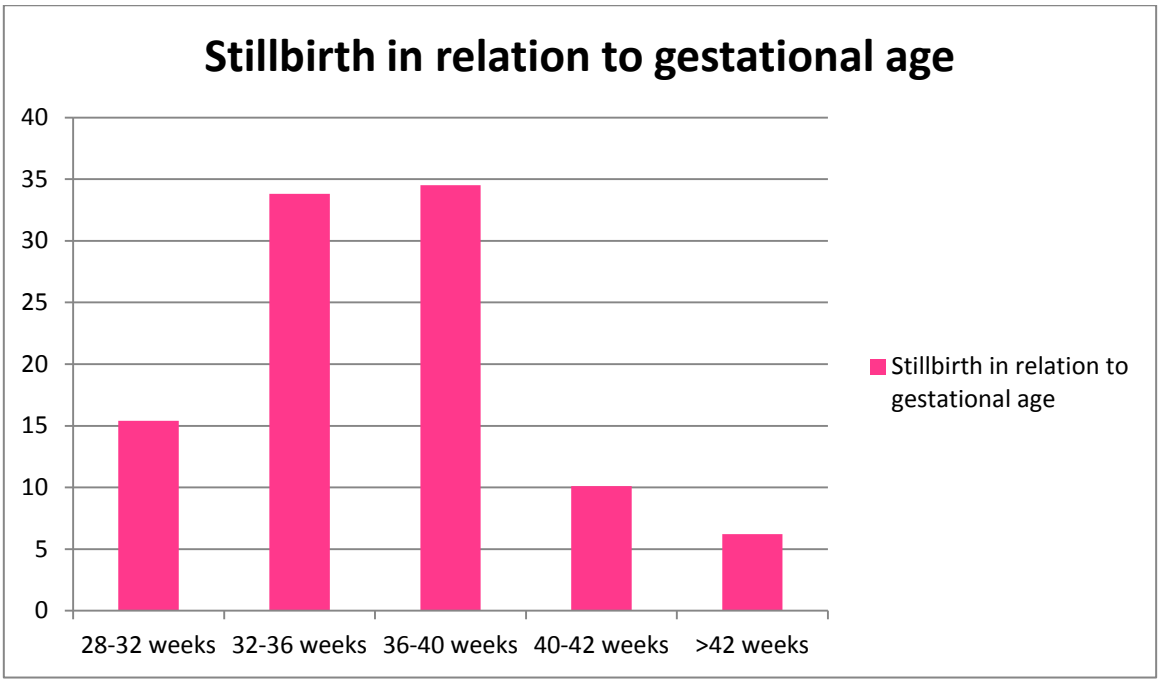
Total birth were 7494

Total stillbirth were 162

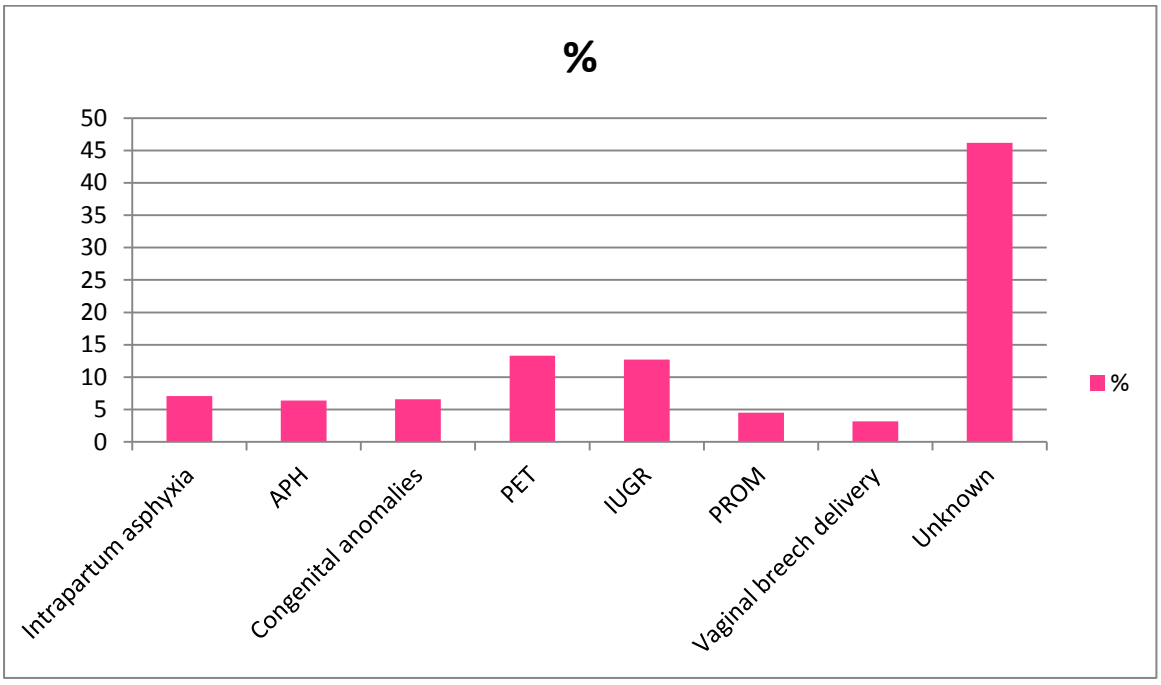
Total stillbirth rate / 1000 birth was 21.6

SEX	NUMBER	%
MALE	64	39.5
FEMALE	98	60.5
TOTAL	162	100

TYPE	NUMBER	%
FRESH	87	53.7
MACERATED	75	46.3
T0TAL	162	100



Causes of stillbirth (%)



Discussion

Stillbirth is a traumatic experience for mother and obstetrician alike .As this was a small hospital based study the results show obstetric experiences in VIMS, pawapuri. There is little published data to make precise conclusion.

A Swedish study showed that the stillbirth rate was found to be highest at 38th completed weeks (2.72%), lowest at40 weeeks (1.23%). In post-term period the rate increased to 2.26%.[3]

In our study total no of stillbirth were 162

Male: female - 40:60

Fresh were39.5%, Macerated were 37.6%;

N/A were 22.9%

Among the causes 46.2% were unknown; 13.3% were PET; 7.1% were intrapartum asphyxia; 6.4 % were APH; 6.6 % were congenital anomalies; 4.5% were PROM; 3.2% were Vaginal breech delivery.

Conclusion

Study suggest that a thorough upgradation of healthcare delivery system is necessary.

Improvement of socioeconomic condition, literacy, and health education among women will definitely lower the stillbirth rate.

Regular antenatal care and institutional delivery can reduce the stillbirth rate.

References

1. Lawn J E, Blencowe H, Pattinson R, Cousens S, Kumar R, Ibiebele I, et al. Stillbirth: Where? When? Why?. Lancet 2011; 377:1448-63.
2. Froen J F, Cacciatore J, Mc ClureE M, Kuti O, Jokhio A H, Islam M et al. Stillbirths: Why they matter. Lancet 2011; 377:1353-66.
3. Ingermarsson I, K. Stillbirth and rate of neonatal death in 76761 post-term pregnancies in Sweden 1982-1991: a register study. Acta Obstet Gynecol Scand 1997; 76(7): 658-62.
4. Ministry of health and Family welfare, Govt of india. INAP: India Newborn Action Plan New Delhi: Govt of India: 2004.
5. R Dandona et al PLoS Med 2017 Aug: 14(8): e1002363.
6. M Aminu et al. Causes of and factors associated with stillbirth in low and middle income countries: a systemic literature review: BJOG 2014; https://doi.org/10.1111/1471-0528.12995.