Research Article

The perinatal mortality in Gauhati medical college, Assam - an introspective analysis

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Abstract

The perinatal mortality is an important indicator of Maternal and Child health. Therefore, we want to analyse PNM in Gauhati Medical College from Jan. 2011 to Dec. 2013. **Aims and Objective:** a) To asses PNM with its causes b) Identify areas of weakness and improve performance. **Material and Method:** The PNM review is done every month with Dept, of Paediatrics. The perinatal period is considered above 20 wks(500gm) upto 1st week of delivery. **Result and Observation:** PNM no. Is in the range of 60-100 in the month out of 1000-1400/ month. Therefore PNM rate is around 60- 80/1000 births in last 3 years. There is no significant change in last 3 years. **Overview:** We analyse September, 2013. The result of other months are almost similar. Total birth: 1365, Total perinatal death: 88, Brought IUD: 52, Failed resuscitation: 4, Nicu Death: 30, Fresh still birth: 2 **Discussion:** In spite of increased institutional delivery after 2005, no significant drop in PNM rate is observed. In Mexico adequate delivery care lead to lowering PNM rate. UN report showed that lack of infrastructure in primary and secondary levels are the reason in this regard. **Conclusion:** No significant change in PNM rate in last 3 years. The improved peripheral services, antenatal care, institutional delivery, skilled birth attendants are necessary. For high risk deliveries, neonatal specialist care is of importance.

Keywords: Perinatal mortality, IUD, neonatal death.

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INTRODUCTION

The perinatal mortality is an important indicator of maternal child health reflecting quality medical care in the society. It also reflect socio-economic and education status of our society. But perinatal mortality, specially still birth is not getting due attention from our policy maker[1]. There are 5.9 million perinatal deaths worldwide; almost all of them are in developing countries. Near half of them are still birth[2,3]. The mellineum goal of the un below 5 years death reduction by 2/3 on 2015 will not materialize if one cannot reduce perinetal mortality. The perinetal mortality rate of India as per recent census is 32 pr 1000 birth. The improved and universal antinatal care, recognizing complications during pregnanacy, timely referal, instituional delivery, better intranatal and postnatal care can reduce perinetal mortality, which is very high in India. With this perspective, we want to analyze perinetal mortality in gauhati medical college from 2011 onwards so that deficiency can be identified and corrective measures taken to reduce perinetal mortality.

AIMS AND OBJECTIVE

Analyse perinatal mortality in Gauhati Medical College, Assam for last three years from January, 2011 to December, 2013 with following objectives.

a) To assess the perinatal mortality with its causes
b) To find out areas of weakness and improve performance

Inclusion Criteria

a) Stillbirth
b) Neonatal death within 7 days of delivery

MATERIAL AND METHODS

The perinatal mortality review is held every month with Dept, of Paediatrics. All cases of perinatal death occured last month are discussed. The perinatal period is considered above 500 gm and above 20wks[4]. As per who, the perinatal mortality rate constitutes 22 completed weeks number of stillbirth and death in 1st weeks of life per 1000 total birth. The perinatal period commences at 22 completed weeks (154) of gestation and ends seven completed days after birth[5]. We consider reference[4] and ends at death in 1st week of life.

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RESULT AND OBSERVATION

The study extends from January, 2011 to December, 2013 and it is an ongoing study. The perinatal mortality no. is in the range of 60 to 100 in a month out of 1000 to 1400 births per month. Therefore perinatal mortality rate is around 60-80 per 1000 births in about last 3 years. There is no significant change in this tertiary care centre. The incidence of IUD is around 30-60 per month. The death in NICU is around 10-30 per month.

Overview

We analyze the findings of September, 2013. The results of other months are similar.

Table 1:

Total No. of births	1365
Total Perinatal deaths	88
Brought IUD	52
Failed resuscitation	4
NICU deaths	30
Fresh still born	2
Cot death	0

Rates

Table 2:

Perinatal mortality per 1000 births	64.46
Brought IUD per 1000 births	38.09
Fresh still born rate	1.46
Deaths in NICU per 1000 births	21.97

Table 3: Probable Causes of Deaths in Brought IUD Cases =52

Causes	Incidence
PIH	07
APH	3
Malpresentation	3
Obstructed labour	2
Eclampsia	2
Ruptured Uterus	0
Cord Prolapse	1
Post Dated	3
Meconium Stained Liquor	3

Causes	Incidence
Anomalous Baby	5
Preterm Deliveries	23
Rh Negative Pregnancy	0

Table 4: NICU Death – 30

		FOS	SBAS	RDS	Hypoglycemia	MAS	Los	NHB	Milk	Aspiration	ICH	Congenital malformation
Term:13	AFD-9	2	5	0	0	1	0	0	0	0	0	1
	SFD-4	0	2	0	0	0	0	0	0	0	0	2
Preterm:17	LBW-10	5	4	2	0	0	0	0	0	0	0	0
	VLBW-6	3	1	0	0	0	2	0	0	0	0	0
	ELBW-1	1	0	0	0	0	0	0	0	0	0	0

Table 5: Perinatal Mortality

Weight	Failed Resurcitation	Fresh Still Born	NICU Death
<l Kg	02	0	01
1. Kg-<1.5 Kg	01	0	09
1.5 Kg-<2 Kg	0	0	07
2.o Kg-<2.5 Kg	01	01	6
2.5 Kg- 3.0 Kg	0	01	05
>3.0 Kg	0	0	02
Total	**04**	**02**	**30**

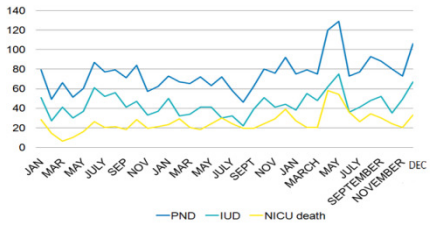

Figure 1: Analysis of PND, IUD and NICU death

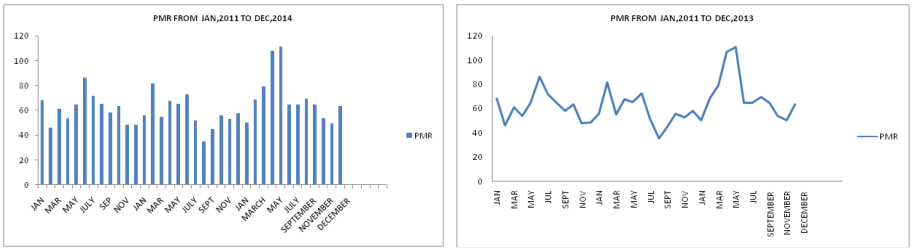

Figure 2: Perinatal Mortality Rates in Last Three Years

The major problem area is IUD at admission. In September 2013, brought IUD cases are 52 out of 88 perinatal deaths with a rate of 38.09. The failed resucitation are 4. The fresh still birth was 2 with rate of 1.46.the death in NICU is 30 with a rate of 21.97 per 1000. The perinatal mortality rate is 64.46 andcorrected perinatal mortality rate is 60.07.the assessments are almost similar in other months also. The brought IUD are mainly for PIH, APH, Malpresentation, Obstructed labour, rupture uterus, Eclampsia, postdated, preterm deliveries. Among the NICU deaths, the leading causes of term cases are early onset sepsis, severe birth Asphyxia, MAS in appropiate for date babies; in small for date babies are ECOS, SBAS, congenital malformation. In preterm EOS, SBAS, RDS are the common causes. Out of 30 deaths in NICU, 13 cases are 2kg or above.

DISCUSSION

Inspite of increased institutional delivery, after national rural health mission launced in 2005 there is no significant drop in perinatal mortality as stated by S. K. Singh *et al*[6]. In India, 57% rise of institutional delivery from 2005 to 2008, but pnm rate is dropped by 2.5%. In Assam, institutional delivery rises by 74.8% in similar period but pnm rate drops by 2.9%. In our study also, there was no significant drop of pnm rate from 2011 up till now which is very alarming. As our hospital is the leading tertiary care centre of north- east region with delivery of more than 13000 in 2013,our pnm rate is high. A study by who, institutional delivery will decrease PMR rate[7]. Another study in Mexico showed adequate care at delivery can lower PMR rate[8]. But un report showed that lack of sufficient manpower in India maybe affecting the effort reaching the goal[9]. The lack of infrastructure in the primary and secondary level is a reason in this regard[10]. The socio economic development, education, cultural and social factors are also needed to be addressed to improve pnm rate. In comparison of causes of PNM are similar to M. B. Bellad *et al*, 2010[11]. The causes like PIH, APH, preterm deliveries are similar to our study. The political will and ownership by the people will get adequate atmosphere for reducing perinatal mortality. The right to health is guranteed by the state to those with live births but also to those who died before birth.

CONCLUSION

There is no significant change in about last 3 years. The improvement of peripherial health services particularly quality antenatal care, institutional deliveries, skill birth attendant are necessary. The up liftment of adequate and timely services in health institutions are needed. For high risk deliveries, NICU and neonatal specialist are of importence. Finances from department of obstetrics and gynaecology of Gauhati Medical College. declaration of interest none.

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