

# PERINATAL MORTALITY SEPTEMBER 2007.

IN CHARGE :  
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# STATISTICS SEPTEMBER 2007

- Total no of maternities = 375.
- Total Vaginal Deliveries = 248(66.1%)
- In Labour Rooms = 223
- in ER = 25
- TOTAL LSCS = 127(33.8%)
- EM LSCS = 95
- EL LSCS = 32

# PERINATAL MORTALITY (SEPTEMBER 2007)

- Still Birth /TOP 24(69%)
- ENND 6 (31%)
- P.M.R =  $30/347 \times 1000 = 86$  PER 1000
- UK 8.7/1000

INDO PAK SUB CONTINENT

40-60/1000

# STILL BIRTHS/TOP 24

**1. CONGENITAL MALFORMATION : 5 (CAN BE PREVENTED BY EMPIRICAL THERAPY OF FOLIC ACID AND EARLY ANOMALY SCAN).**

- A. ANENCEPHALIC 4**
- B. MENINGEOMYELOCELE 1.**
- C. OMPHALOCELE.**
- D. DANDY WALKER SYNDROME.**

**2. PRETERM 14**

**3. MATERNAL DISEASE**

- PRE ECLAMPSIA 1**
- ECLAMPSIA**
- D.M 1`**
- PIH 0**

**4. ANTEPARTUM HAEMORRHAGE**

- A. ABRUPTIO 3**
- B. PLACENTA PRAEVIA 0**

**5. UNEXPLAINED IUD AT TERM 2**

**6. OBSTRUCTED LABOUR/BIRTH ASPHYXIA 2**

# EARLY NEONATAL DEATHS 6

• Congenital malformation	1
• Preterm labour	4
1. Spontaneous	4
2. Iatrogenic	0
• IUGR	
• Antepartum haemorrhage	
1. MAJOR DEGREE Placenta Previa +PRETERM	0
2. Abruptio Placenta (PIH) +PRETERM	2
3. Type I low lying placenta +PRETERM	1
• PIH	
• Pre-Eclampsia	1
• Eclampsia	0
• CORD ACCIDENT	0
• Intrapartum Asphyxia	0
• Infection (N.N SEPSIS)	0
• Maternal Disease	0
• Obstructed Labour	0
• Hemolytic Disease	

# STATISTICS OF PAEDIATRICS DEPARTMENT.

- Total Admission = 228
- Total Expiries = 37
- RGH = 6

# B/O ANEEZA REHMAN.

- Name: Aneeza.
- Husband's Name: Rehman.
- Age: 25 years.
- Married For: 6 years.
- Address: Tench bhatta,Rawalpindi.
- G4P2<sup>+1</sup>(1 unexplained intrauterine death at term)
- DOA: 23.9.2007.(5:00 am)
- MOA: Emergency.
- Presenting Complaint:  
Gestational amenorrhea: 32 weeks(non-booked).  
Labour pains: since,evening.

# SUMMARY.

- **Examination:**

**General Physical Examination :**Unremarkable.

**Abdominal Examination:** abdomen soft,nontender.fundal height32 cms.  
cephalic presentation,Fetal cardiac activity +ve.

**Vaginal Examination:** os=fully dilated.

- **Investigations:Not sent.**

- **Treatment:**received fully dilated in emergency .

- **Mode Of Delivery:** Spontaneous vertex delivery was conducted emergency in by Dr.Irum (HO) undersupervision of Dr.Shazia(MO) on 23.9.07 at 5:00am.

- **Outcome :** Alive F/C of A/S 5/10,5/10 of 1.6kg(VLBW) was delivered.Paediatrician was not present at the time of delivery as no call was sent.Baby was transferred to NICU as some limb deformity was noted.

**Maternal Risk Factors:** non-booked, Preterm .

- **Avoidable Factors:regular antenatal visits.**

- **Date Of Expiry:** 23.9.07 1:30pm..



# CASE NO 1

- B/O Aneeza , NB , FC , 1.6 kg wt
- SVD , RGH, Gyane ER ,G<sub>4</sub>P<sub>2</sub><sup>+1</sup> GA 32 wks
- Admitted on 23/9/07 at 5:30am
- Maternal H/O not available
- **Call was not sent to Paeds Dept**
- Baby delivered with apgar score 5/10 & 5/10
- Resuscitated not done.
- O/E: multiple congenital anomalies,cyanosed , no spontaeous respiration ,with poor peripheral pulses & depressed NNR
- **Diagnosis:** Prematurity , Birth Asphyxia ,Multiple Congenital anomalies
- **Managed with** immediate ventilatory support,Incubator care, broad spectrum antibiotics, Infusion dopamine , Infusion Aminophylline ,
- Expired on 23/9/07 at 1 :30pm
- **Total duration of hospital stay was 7 and half hrs**

# B/O MUSSARAT AHMED.

- **Name:** Mussarat.
- **Husband's Name:** Ahmed.
- **Age:** 28 years.
- **Married For:** 8 years.
- **Address:** Rawalpindi..
- **G5P4+0.**
- **DOA:** 8.9.2007.(1:30 pm)
- **MOA:** Emergency.
- **Presenting Complaint:**
  - Gestational amenorrhea: 28 weeks(non-booked).
  - Labour pains since morning.

- **Examination:**

**General Physical Examination: Unremarkable.**

**Abdominal Examination:** fundal height=36 cm, twins both breech, 2 moderate and 1 severe in 10 min, FCA: +ve of both twins.

**Vaginal Examination:** fully dilated. feet were felt in vagina..

**ABDOMINAL USG:** Twins. Both breech with parameters of 28 weeks. Fetal cardiac activity +ve of both twins. Placent = fundal. Separating membrane seen.

**Treatment:** Baseline investigations were sent. Attendants did not give consent for Caesarean and fetal prognosis was explained to attendants.

**Mode Of Delivery:** First twin was delivered as breech by Dr. Naila followed by delivery of first placenta and membranes at 2:00 pm. Second twin was delivered as breech by Dr. Samina Tasleem followed by delivery of second placenta.

- **OUTCOME:** First twin was Alive F/C with A/S 7/10, 8/10) of 0.8kg and second was alive F/C with A/S of 7/10, 8/10 of 1 kg.. Paediatrician was present at the time of delivery (No documentation done.) Babies were transferred to NICU.
- **Maternal Risk Factors:** Non-booked, grandmultipara, twins, Breech, Preterm.
- **Avoidable Factors:** Regular antenatal care
- **Date Of Expiry:** 8.9.07 at 11:45 pm (after 9 hours) (first twin).

# CASE NO 2

- B/O Mussarat, twin 1, NB , FC , 800 gm wt
- SVD , RGH , G<sub>5</sub>P<sub>4</sub><sup>+0</sup> , GA 28 wks
- Admitted on 8/9/07 at 02 :45 pm
- 
- Baby delivered with apgar score 2/10 & 4/10
- Resuscitated with full protocol at birth
- O/E:V.sick, cyanosed , hypothermic, with poor p.pulses , depressed NNR.
- **Diagnosis:** Prematurity, twin pregnancy, Birth Asphyxia Sarnett II.
- **Managed with** Broad spectrum antibiotics, Infusion dopamine & remained on ventilatory support for 2:30 hours.
- **Expired on** 8/9/07 at 11 :45pm
- **Total duration of hospital stay was 9hrs**

# B/O NAILA ZULFIQAR.

- **Name:** Naila.
- **Husband's Name:** Zulfiqar.
- **Age:** 21 years.
- **Married For:** 2years.
- **Address:** Sawan camp,Rawalpindi..
- **G2P2<sup>+</sup>**(previous preterm delivery, Twins died at 17<sup>th</sup> postnatal day, no alive issue).
- **DOA:** 2.9.2007(9:55 pm)
- **MOA:** Emergency
- **PRESENTING COMPLAINT:**
  - Gestational amenorrhea: 29 weeks(non-booked).
  - Labour pains: since morning.
  - (Referred from DHQ hospital Rawalpindi)

- **Examination:**

**General Physical Examination:** unremarkable.

**Abdominal Examination:** Fundal height=30 cm, cephalic presentation, FCA +ve. Palpable contractions: 3 mild in 10 min.

**Vaginal Examination:** os=4 cm dilated, with 70% effacement, membranes =intact and bulging.

**USG:** S/L/C, FCA:+ve, BPD and FL Of 28 wks, Placenta=fundal, Liquor=adequate.

**Management:** Baseline investigations sent, Dexa therapy was given. Tocolysis was started with 10mg cap. Nifedipine. Patient was admitted in labour room and attendants were counselled regarding fetal prognosis.

**Mode Of Delivery:** She was received in labour room on 2.9.07 at 10:30 pm from ER. On examination she was found to be 5cm dilated with intact membranes. Spontaneous vertex delivery was conducted by Dr. Irum (HO) under supervision of Dr. Salma (SR) on 2.9.07 at 11:30 pm after one and a half hour.

**Outcome:** Alive M/C with A/S 6/10, 5/10 of 1.1kg (VLBW) was delivered as cephalic. Placenta was found to be complete and healthy. Paediatrician came 5 mins after delivery of the baby. Baby was moaning, cyanosed and hypothermic when paediatrician arrived and baby was transferred to NICU.

**Maternal Risk Factors:** non-booked, preterm, previous history of preterm delivery followed by early neonatal death.

**Avoidable Factors:** Antenatal care at hospital.

- **Date Of Expiry:** 3.9.07 at 2:00am (after 21/2 hours).

## CASE NO 3.

- B/O Naila Zulifqar, NB , MC , 11 gm wt
- SVD , RGH ,G2P2,GA 28 wks
- Admitted on 2.9.07 at 11:30 pm.
- **Call attended by Paeds Dept**
- Baby delivered with apgar score 4/10 & 5/10
- O/E: V.sick ,cyanosed , hypothermic, with poor p.pulses , depressed NNR
- **Diagnosis:** Birth Asphyxia ,prematurity.
- **Managed with** Broad spectrum antibiotics, Infusion dopamine , Infusion Aminophylline
- **Expired on 3/9/07 at 2 :00 am**
- **Total duration of hospital stay was 2 and half hrs**

# B/O NOREEN KAMRAN.

- **Name:** Noreen.
- **Husband's Name:** Kamran.
- **Age:** 27 years.
- **Married For:** 5 years.
- **Address:** Dhok chaudhrian, Rawalpindi.
- **G3P2<sup>+0</sup>**(Previous 2 LSCS due to acute fetal distress)
- **DOA:** 20.8.2007(1:10 pm)
- **MOA:** OPD.
- **Presenting Complaint:**
  - Gestational amenorrhea: 35 weeks(booked III only 2 visits).
  - Lower abdominal pain and backache: since morning.



- **Examination:**

**General Physical Examination:** Pulse;96 /min,B.P:120/80,temp:afebrile,R/R:18/min,Pallor:++.

**Abdominal Examination:**,Fundal height=34 cm,S/L/C,FCA +ve,Engagement=5/5 palpable head,scar tenderness=-ve,Palpable contractions:nil in 10 min.

**Vaginal examination:**not done.

- **Investigations:** Hb:6.6g/dl,MSU:clear, serum ferritin=5.05,Hb electrophoresis=normal..

- **Abdominal USG:**Single longitudinal cephalic,BPDand FL:37 wks,FCA:+ve,Placenta:upper anterior,Liqour=adequate with suspicion of polycystic kidneys(done on 3.9.07 by Dr.Qaiser) .

- **Anomaly Scan:(done on 5.9.07 )**showed no congenital anomaly.

- **Management:**Patient remained admitted initially in labour room where 2 units of packed cells were transfused and was then transferred to HRW where 2 more packed cells tranfusions were done and her elective caesarean was planned at 38 weeks.

- **Mode Of Delivery:**Her El LSCS was carried out on 8.9.07 at 38 weeks by Dr.Sara(MO).

- **Outcome:** Delivered an alive F/C with A/S 5/10,6/10 of 2.5 kg(LBW).Baby was cyanosed and hypothermic. Paediatrician was present at the time of delivery and baby was transferred to NICU after immediate resuscitation in a very sick condition.No congenital anomaly was seen.

- **Maternal Risk Factors:**,Previous 2 LSCS,anemia.

- **Avoidable Factors:**Regular antenatal care.

- **Date Of Expiry:** 24.8.07 at 9:30 pm after 15 hours.

# CASE NO 4

- B/O Noreen , NB , FC , 2.5 kg wt
- EILSCS , RGH , G<sub>3</sub>P<sub>2</sub>+<sup>o</sup>, GA 38 wks
- Admitted on 08/9/07 at 10:00 am
- **Call was attended by Paeds department**
- Antenatal risk factors: Anemia
- APGAR score 2/10 and 4/10.
- O/E: pale, moaning, cyanosed, hypothermic, with poor peripheral pulses & depressed NNR
- **Diagnosis:** Birth Asphyxia sarnet III
- **Managed with** Incubator care, broad spectrum antibiotics, Infusion dopamine , went into arrest after 1hr, shifted to ventilator, remaind on ventilator for 4hrs.
- **Expired on 8/9/07 at 03:00pm**
- **Total duration of hospital stay was 5hrs**

## B/O SAFIA TANVEER.

- **Name:** Safia.
- **Husband's Name:** Tanveer.
- **Age:** 35 years.
- **Married For:** 10 years.
- **Address:** Gujar Khan.
- **G5P3<sup>+1</sup>.**
- **DOA:** 3.9.2007(7:25 pm)
- **MOA:** Emergency.
- **Presenting Complaint:**
  - Gestational amenorrhea: 32+weeks(non-booked).
  - labour pains: since,morning.
  - watery discharge: since,2:00 pm(>5 hours)

# SUMMARY.

- **Examination:**

**General Physical Examination:** Unremarkable.

**Abdominal Examination:**, Fundal height=32 cm,FCA +ve,Cephalic presentation, Head 2/5 palpable,Palpable contractions=3 moderate in 10 mins.

**Speculum Examination:** (done under aseptic measures)draining clear liquor.

**Vaginal Examination:**os=4 cm dilated,cervix50% effaced,membranes=intact.

- **Abdominal USG:**S/L/C,FCA:+ve,Liquor=adequate,Placenta=anterior low lying but presenting part ahead of placenta,BPD=75mm(30 wks),FL=62.7mm(32 wks).

- **Management:**Baseline investigations were sent,dexatherapy given,antibiotics started after taking HVS.attendants were counselled about referral to PIMS for better neonatal care but attendants refused.

- **Mode Of Delivery:** Spontaneous Vertex delivery was conducted By Dr.ayesha(HO) under supervision of Dr.Asia(MO) on 3.9.07 at 8:30 pm (after 1 hour).

- **Outcome:** Alive M/C with A/S 9/10,10/10 of 2 kg(2 kg) ..Paediatrician was not present at the time of delivery and baby was transferred to NICU after immediate resuscitation

**Maternal Risk Factors:** Non-booked,grandmultipara,  
Preterm.

- **Avoidable Factors:**Regular antenatal visits.

- **Date Of Expiry:** 6.9.07 at 12:15pm(after 3 days).

# CASE NO 5

- B/O Safia , NB , MC , 1 kg wt
- SVD , RGH ,G5 P3<sup>+1</sup> GA 30 wks
- Admitted on 3/9/07 at 9:00 pm
- Maternal H/O PV bleeding for 36 hrs +ve
- **Call was not sent to Paeds Dept**
- Baby delivered with apgar score 1/10 & 2/10
- **O/E:** moaning, cyanosed , with absent peripheral pulses , gasping respiration & depressed NNR
- **Diagnosis:** Prematurity, LBW ,Birth Asphyxia Sarnett III
- **Managed with** Incubator care, broad spectrum antibiotics, Infusion dopamine , Infusion Aminophylline, FFP's transfused
- **Expired on** 6/9/07 at 9:30 pm
- **Total duration of hospital stay was 3 days & 30 min**

# B/O TABASSUM ASIF.

- **Name:** Tabassum.
- **Husband's Name:** Asif.
- **Age:** 35 years.
- **Married For:** 8 years.
- **Address:** Rawalpindi.
- **G4P2<sup>+1</sup>**(Previous 2 LSCS,1 alive issue,2<sup>nd</sup> child had multiple congenital anomalies abdominal distension,choanal atresia,low set ears,webbed neck).
- **DOA:** 19.9.2007.
- **MOA:** OPD.
- **Presenting Complaint:**  
Gestational amenorrhea: 38+weeks(Booked III).  
Admitted in HRW for elective LSCS.

- EXAMINATION:

GENERAL PHYSICAL EXAMINATION: Unremarkable.

ABDOMINAL EXAMINATION: Fundal height=37 cm, FCA +ve, Breech presentation.

- ANOMALY SCAN: S/L/B, FCA=+ve, BPD=88mm(36 wks), FL=69mm(36 wks) weeks, Liquor=grossly reduced with enlarged polycystic kidneys.
- MODE OF DELIVERY: Her Em.LSCS was carried out on 19.9.07 at 11:00pm by Dr.Farwa(MO) under supervision of Dr.Lubna(SR) as there was +ve scar tenderness .  
OUTCOME: Delivered an alive M/C with A/S 8/10,9/10 of 3kg approx.delivered as cephalic. delivered as extended breech.Abnormality in left knee joint was noted.
- Paediatrician was not present at the time of delivery although call was sent and noted and on examination by paediatrician baby was found to be lethargic ,cyanosed,hypothermic and sick with A/S 5/10,6/10. Baby was transferred to NICU
- MATERNAL RISK FACTORS: Previous 2 LSCS,Breech presentation,history of congenital anomalies in last pregnancy.
- Avoidable factors:Regular antenatal visits,mandatory anomaly scan at 20 wks gestation.
- DATE OF EXPIRY:20.9.07 at 12:45 am.

# CASE NO 6

- B/O Tabbasum Asif,NB,MC,2.5 kg wt
- El.LSCS d/t breech presentation,G4P2<sup>+1</sup> ,GA32wks
- Antenatal polycystic kidneys,oligohydramnios
- Admitted on 20/9/07 at 11:30pm
- Call attended by paediatrics dept
- Baby delivered with apgar score 2/10 &4/10
- Resuscitated with full protocol in OT
- O/E:Sick,weak pulses ,depressed NNR,multiple congenital anomalies
- DIAGNOSIS:preterm,LBW,birth asphyxia,multiple congenital anomalies.
- Managed with broad spectrum antibiotics,I/V Fluids,
- Expired on 21/9/07 at 12:45am
- Total duration of hospital stay was 1 hour 15 minutes



**TABLE 88-2 Hypoxic-Ischemic Encephalopathy in Term Infants**

<b>Signs</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage 3</b>
Level of consciousness	Hyperalert	Lethargic	Stuporous, coma
Muscle tone	Normal	Hypotonic	Flaccid
Posture	Normal	Flexion	Decerebrate
Tendon reflexes/clonus	Hyperactive	Hyperactive	Absent
Myoclonus	Present	Present	Absent
Moro reflex	Strong	Weak	Absent
Pupils	Mydriasis	Miosis	Unequal, poor light reflex
Seizures	None	Common	Decerebration
Electroencephalographic	Normal	Low voltage changing to seizure activity	Burst suppression to isoelectric
Duration	<24 hr if progresses; otherwise, may remain normal	24 hr to 14 days	Days to weeks
Outcome	Good	Variable	Death, severe deficits

*Modified from Sarnat H, Sarnat M: Neonatal encephalopathy following fetal distress: A clinical and electroencephalographic study. Arch Neurol 1976; 33:696. Copyright 1976, American Medical Association.*

**THANK YOU**

# **Hypoxic-Ischemic Encephalopathy in Term Infants**

**Signs  
Level**

**Stage 1**

**Stage 2**

**Stage 3**