Early life changes
Draak, Maaike den

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# Appendix A

## List of acronyms and abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACOG:</td>
<td>American College of Obstetricians and Gynecologists</td>
</tr>
<tr>
<td>AGA:</td>
<td>Appropriate-for-gestational-age</td>
</tr>
<tr>
<td>AR(E):</td>
<td>Attributable risk among the exposed</td>
</tr>
<tr>
<td>B:</td>
<td>Birth(s) (all)</td>
</tr>
<tr>
<td>BA:</td>
<td>Birth asphyxia</td>
</tr>
<tr>
<td>CCOPMM:</td>
<td>Consultive Council on Obstetric and Paediatric Mortality and Morbidity, Victoria, Australia</td>
</tr>
<tr>
<td>CHD:</td>
<td>Congenital heart disease</td>
</tr>
<tr>
<td>CHN:</td>
<td>China</td>
</tr>
<tr>
<td>CI:</td>
<td>Confidence interval</td>
</tr>
<tr>
<td>CPD:</td>
<td>Cephalo-pelvic disproportion</td>
</tr>
<tr>
<td>CTEV:</td>
<td>Congenital talipes equinovarus or clubfoot</td>
</tr>
<tr>
<td>DHS:</td>
<td>Demographic and Health Survey</td>
</tr>
<tr>
<td>EDC:</td>
<td>Expected data of confinement</td>
</tr>
<tr>
<td>EF:</td>
<td>Etiologic fraction</td>
</tr>
<tr>
<td>ELBW:</td>
<td>Extremely low birth weight (&lt; 1,000 g)</td>
</tr>
<tr>
<td>EME:</td>
<td>Established Market Economies</td>
</tr>
<tr>
<td>ENND:</td>
<td>Early neonatal death(s)</td>
</tr>
<tr>
<td>EP:</td>
<td>Ectopic pregnancy/pregnancies</td>
</tr>
<tr>
<td>EUROCAT:</td>
<td>European Surveillance of Congenital Anomalies, formerly European Registration of Congenital Anomalies</td>
</tr>
<tr>
<td>FGR:</td>
<td>Foetal growth ratio</td>
</tr>
<tr>
<td>FPD:</td>
<td>Foeto-pelvic disproportion</td>
</tr>
<tr>
<td>FSE:</td>
<td>Formerly Socialist economies of Europe</td>
</tr>
<tr>
<td>GBD:</td>
<td>Global Burden of Disease Study</td>
</tr>
<tr>
<td>GCT:</td>
<td>Glucose Challenge Test</td>
</tr>
<tr>
<td>HIE:</td>
<td>Hypoxic-ischaemic encephalopathy</td>
</tr>
<tr>
<td>IA:</td>
<td>Induced abortion(s)</td>
</tr>
<tr>
<td>IBN:</td>
<td>In-Born Nursery</td>
</tr>
<tr>
<td>ICBDMMS:</td>
<td>International Clearinghouse for Birth Defects Monitoring Systems</td>
</tr>
<tr>
<td>ICD:</td>
<td>International Classification of Diseases</td>
</tr>
<tr>
<td>IIPS:</td>
<td>International Institute for Population Sciences, Mumbai, India</td>
</tr>
<tr>
<td>IMR:</td>
<td>Infant Mortality Rate</td>
</tr>
<tr>
<td>IND:</td>
<td>India</td>
</tr>
<tr>
<td>IP:</td>
<td>Inpatient</td>
</tr>
<tr>
<td>IUGR:</td>
<td>Intraterine growth retardation</td>
</tr>
<tr>
<td>LAC:</td>
<td>Latin America and the Caribbean</td>
</tr>
<tr>
<td>LB:</td>
<td>Live birth(s)</td>
</tr>
</tbody>
</table>
LBW: Low birth weight (< 2,500 g)
LGA: Large-for-gestational-age
LMP: Last menstrual period; time since first day of last menstrual period
MCCD: Medical Certification of Cause of Death, India
MEC: Middle Eastern Crescent
NCHS: National Center for Health Statistic, USA
NICU: Neonatal Intensive Care Unit
NFHS: National Family Health Survey, India
   NFHS-1 conducted in 1992-1993
   NFHS-2 conducted in 1998-1999
NND: Neonatal death(s)
NTD: Neural tube defect
OAI: Other Asia and Islands
OBN: Out-Born Nursery
OP: Outpatient
OR: Obstetric Register
PDA: Patent ductus arteriosus, or open ductus Botalli
PH: Pregnancy-induced hypertension
PPS: Postpartum sterilisation
PRC: Population Research Centre
RR: Relative risk
SA: Spontaneous abortion(s)
SATH: SAT Hospital – Sri Avittom Thirunal Hospital, Medical College, Thiruvanthapuram, Kerala, India
SB: Stillbirth(s)
SGA: Small-for-gestational-age
SN: Sick Nursery
SRS: Sample Registration System, India
SSA: Sub-Saharan Africa
UN: United Nations
USS: Ultrasound scan
VBAC: Vaginal birth after caesarean
VDRL: Veneral Disease Research Laboratory
VLBW: Very low birth weight (< 1,500 g)
WHO: World Health Organization
Appendix B
Regions in the Global Burden of Disease Study

The regions used in the Global Burden of Disease Study (GBD) are defined as follows (World Bank 1993, p.xi):

- **Established market economies** (EME) includes all the countries of the Organization for Economic Cooperation and Development (OECD) except Turkey, as well as a number of small high-income economies in Europe.
- **Formerly socialist economies of Europe** (FSE) includes the European republics of the former Soviet Union and the formerly socialist economies of Eastern and Central Europe.
- **India** (IND)
- **China** (CHN)
- **Other Asia and islands** (OAI) includes the low- and middle-income economies of Asia (excluding India and China) and the islands of the Indian and Pacific oceans except Madagascar.
- **Sub-Saharan Africa** (SSA) comprises all countries south of the Sahara including Madagascar and South Africa but excluding Mauritius, Reunion, and Seychelles, which are in the Other Asia and islands groups.
- **Latin America and the Caribbean** (LAC) comprises all American and Caribbean economies south of the United States, including Cuba.
- **Middle Eastern crescent** (MEC) consists of the group of economies extending across North Africa through the Middle East to the Asian republics of the former Soviet Union and including Israel, Malta, Pakistan, and Turkey.

The regions include the following countries (World Bank 1993, p.212):

- **EME**: Andorra, Australia, Austria, Belgium, Bermuda, Canada, Channel Islands, Denmark, Faeroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Holy See, Iceland, Isle of Man, Italy, Ireland, Japan, Liechtenstein, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Portugal, San Marino, Spain, St. Pierre and Miquelon, Sweden, Switzerland, United Kingdom, United States.

- **FSE**: Albania, Belarus, Bulgaria, Czechoslovakia, Estonia, Hungary, Latvia, Lithuania, Moldova, Poland, Romania, Russian Federation, Ukraine, Yugoslavia.

- **India**

- **China**

- **OAI**: American Samoa, Bangladesh, Bhutan, Brunei, Cambodia, Cook Islands, Democratic People’s Republic of Korea, Federation States of Micronesia, Fiji, French Polynesia, Guam, Hong Kong, Indonesia, Johnston Island, Kiribati, Lao PDR, Macao, Malaysia, Maldives, Marshall Islands, Mauritius, Midway Island, Myanmar, Mongolia, Nauru, Nepal, New Caledonia, Niue,


- **LAC**: Anguilla, Antigua and Barbuda, Argentina, Aruba, The Bahamas, Barbados, Belize, Brazil, British Virgin Islands, Bolivia, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Falkland/Malvinas Islands, French Guiana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Suriname, St. Kitts and Nevis, St. Lucia, St.Vincent, Trinidad and Tobago, Turks and Caicos Islands, Uruguay, Venezuela, Virgin Islands (U.S.).

- **MEC**: Afghanistan, Algeria, Armenia, Azerbaijan, Bahrain, Cyprus, Egypt, Gaza Strip, Georgia, Iran, Iraq, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Libya, Malta, Morocco, Oman, Pakistan, Qatar, Republic of Yemen, Saudi Arabia, Syrian Arab Republic, Tajikistan, Tunesia, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, West Bank, Western Sahara.
Appendix C

ICD-9

With regard to infant and neonatal mortality, most of the more recent classifications used here are based on the ninth revision of the International Classification of Diseases (ICD) of the World Health Organization (WHO) which dates from 1975. According to the data in Chapter 2, the following cause categories are important with regard to neonatal, postneonatal and infant mortality: ‘certain conditions originating in the perinatal period’, ‘congenital anomalies’, ‘diseases of the respiratory system’, and ‘infectious and parasitic diseases’.

Certain conditions originating in the perinatal period

In the ICD-9, this category contains the following disorders:

- foetus or newborn affected by maternal conditions (e.g. maternal hypertensive disorders, maternal infection, surgical operation on mother, noxious influences transmitted via placenta or breast milk),
- foetus or newborn affected by maternal complications of pregnancy (e.g. premature rupture of membrane, ectopic pregnancy, multiple pregnancy, antepartum malpresentation),
- foetus or newborn affected by complications of placenta, cord or membranes (e.g. prolapsed cord, chorioamnionitis),
- foetus or newborn affected by other complications of labour or delivery (e.g. breech delivery, forceps delivery, caesarean delivery),
- slow foetal growth and foetal malnutrition (e.g. light-for-dates, foetal growth retardation),
- disorders relating to short gestation and low unspecified birth weight (e.g. extreme immaturity),
- disorders relating to long gestation and high birth weight (e.g. heavy-for-dates, post-term infants),
- birth trauma (e.g. haemorrhage, scalp injury, injury to spine and spinal cord),
- intrauterine hypoxia and birth asphyxia (e.g. foetal distress before or during labour in liveborn infant),
- respiratory distress syndrome of newborn,
- other respiratory conditions of foetus and newborn (e.g. congenital pneumonia, chronic respiratory disease arising in perinatal period),
- infections specific to the perinatal period (e.g. tetanus neonatorum, congenital infections such as congenital rubella),
- foetal and neonatal haemorrhage (e.g. foetal blood loss, post-birth umbilical haemorrhage),
- haemolytic disease of foetus and newborn due to isoimmunization (e.g. rh isoimmunization),
- other perinatal jaundice (e.g. neonatal jaundice associated with preterm delivery),
- neonatal endocrine and metabolic disorders (e.g. syndrome of infant of a diabetic mother, neonatal hypoglycemia),
- haematological disorders of foetus and newborn (e.g. congenital anaemia, anaemia of prematurity),
- perinatal gastrointestinal system disease disorders of digestive system (e.g. other meconium obstruction, necrotizing enterocolitis of newborn),
- conditions involving the integument and temperature regulation of the foetus and newborn (e.g. newborn hypothermia),
• other and ill-defined perinatal conditions (e.g. convulsions of newborn, newborn feeding problems, newborn drug withdrawal syndrome).

The category thus includes very diverse conditions including the more exogenous causes such as infections. In addition, the list above also indicates some of the underlying causes of these conditions. In practice, when assigning the cause of death to a category, there is considerable overlap. For example, a preterm delivery may be caused by incompetent cervix and may result in respiratory distress syndrome and temperature regulation problems.

**Congenital anomalies**

The category of ‘congenital anomalies’ includes the following disorders: anencephalus and similar anomalies, spina bifida, other nervous system anomalies, congenital heart anomalies, congenital anomalies of circulatory system, congenital anomalies of respiratory system, cleft palate and cleft lip, congenital anomalies of digestive system, musculoskeletal anomalies, and chromosomal anomalies.

**Diseases of the respiratory system**

The category of ‘diseases of the respiratory system’ includes the following diseases: acute respiratory infections (e.g. acute nasopharyngitis (common cold), acute upper respiratory infection, acute bronchitis), pneumonia and influenza, and chronic obstructive pulmonary disease and allied conditions (e.g. bronchitis, asthma).

**Infectious and parasitic diseases**

The category of ‘infectious and parasitic diseases’ includes the following diseases: intestinal infectious diseases (e.g. cholera, typhoid), tuberculosis, bacterial diseases (e.g. tetanus, septicaemia), HIV, viral diseases with exanthem (e.g. smallpox, herpes zoster, herpes simplex, measles, rubella), arthropod borne viral diseases (e.g. yellow fever, viral encephalitis), other diseases due to viruses and chlamydiae (e.g. viral hepatitis), malaria, syphilis and other veneral diseases (e.g. congenital syphilis, gonococcal infections), and toxoplasmosis.
Appendix D
List of informants in India by year of communication

2000; during survey in SAT Hospital, Thiruvananthapuram

- Dr. P.K. Syamala Devi (Professor and Head of the Department of Obstetrics & Gynaecology); Department of Obstetrics & Gynaecology, SAT Hospital, Medical College, Thiruvananthapuram, Kerala
- Dr. K. Syamalan (Associate Professor of Statistics & Demography); Department of Obstetrics & Gynaecology, SAT Hospital, Medical College, Thiruvananthapuram, Kerala
- Dr. Sree Kala Devi S. (Postgraduate Student in Obstetrics & Gynaecology); Department of Obstetrics & Gynaecology, SAT Hospital, Medical College, Thiruvananthapuram, Kerala

- Dr. M. Fazia (Professor of Paediatrics, Head of Neonatology); Department of Paediatrics, SAT Hospital, Medical College, Thiruvananthapuram, Kerala
- Dr. P.Y. Henry (Assistant Professor, paediatric surgeon); Department of Paediatric Surgery and SATHHES Ultrasound Scanning Service, SAT Hospital, Medical College, Thiruvananthapuram, Kerala
- Dr. S. Irudaya Rajan (Associate Fellow, demographer); Centre for Development Studies, Thiruvananthapuram, Kerala

- Dr. Nirmala C. (Assistant Professor, gynaecologist and obstetrician); Department of Obstetrics & Gynaecology, SAT Hospital, Medical College, Thiruvananthapuram, Kerala
- Dr. Rajmohan (paediatrician); Department of Paediatrics, SAT Hospital, Medical College, Thiruvananthapuram, Kerala
- Dr. V. Raman Kutty (Executive Director, paediatrician); Health Action by People, Thiruvananthapuram, Kerala

- Dr. Sheela Shenoy (Associate Professor); Department of Obstetrics & Gynaecology, SAT Hospital, Medical College, Thiruvananthapuram, Kerala
- Dr. C.R. Soman (Chairman, biochemist); Health Action by People, Thiruvananthapuram, Kerala

1998; during feasibility study

- Dr. Sandya Baindoor (paediatrician); Karnataka Institute of Medical Science, Hubli, Karnataka
- Dr. C.G. Chandrika Devi (Professor and Head of the Department of Obstetrics & Gynaecology); Department of Obstetrics & Gynaecology, SAT Hospital, Medical College, Thiruvananthapuram, Kerala
- Dr. S.R. Hiremath (Professor of Obstetrics & Gynaecology); Karnataka Institute of Medical Science, Hubli, Karnataka
- Dr. S. Irudaya Rajan (Associate Fellow, demographer); Centre for Development Studies, Thiruvananthapuram, Kerala
- Dr. I. Johnson (neonatologist); Cosmopolitan Hospital, Thiruvananthapuram, Kerala
• Dr. Bharati S. Korlhalli (gynaecologist and obstetrician); Tavargeri Nursing Home, Dharwad, Karnataka
• Dr. Meera Nair (gynaecologist and obstetrician); Cosmopolitan Hospital, Thiruvananthapuram, Kerala
• Dr. M.K.C. Nair (Director of the Child Development Centre, paediatrician); Child Development Centre, Medical College, Thiruvananthapuram, Kerala
• Sabu S. Padmadas (PhD fellow at PRC Groningen, demographer); University of Kerala, Department of Demography and Population Research Centre, Thiruvananthapuram, Kerala
• Prof. Dr. A. Pandey (Professor); Department of Mathematical Demography and Statistics, International Institute for Population Studies (IIPS), Mumbai
• Dr. V. Raman Kutty (Executive Director, paediatrician); Health Action by People, Thiruvananthapuram, Kerala
• Dr. K. Sabarinathan (paediatrician and neonatologist, former Professor and Head of the Department of Paediatrics, Medical College, Thiruvananthapuram); Cosmopolitan Hospital, Thiruvananthapuram, Kerala
• Dr. Sarvamangala Devaraju (gynaecologist and obstetrician); Mangala Maternity & Surgical Home (private), Dharwad, Karnataka
• Dr. K.T. Shenoy (Professor of Gastroenterology); Medical College, Thiruvananthapuram, Kerala
• Dr. Shivashankay (paediatrician); Karnataka Institute of Medical Science, Hubli, Karnataka
• Dr. P. Shreekant (paediatrician); Tavargeri Nursing Home, Dharwad, Karnataka
• Dr. K. Syamalan (Associate Professor of Statistics & Demography); Department of Obstetrics & Gynaecology, SAT Hospital, Medical College, Thiruvananthapuram, Kerala
• Dr. K.M. Tavergeri (gynaecologist and obstetrician); Tavargeri Nursing Home, Dharwad, Karnataka
PART A
REGISTRATION FORM FOR DATA OF ANTENATAL CHART AND LABOUR RECORD
Sri Avittam Thirunal Hospital, Trivandrum, 2000

Identification

Pro Forma number: ……………… ☐ Multiple pregnancy: yes
I.P. number: ……………………… ☐ Delivery + newborn data added?
O.R. number: …………………… ☐ Postnatal card given?
Unit: …………………… ☐ Discharge data / Part B added?
Date of admission: ……………….. ☐ Data entered in computer?

Name: ………………………………………………………………………………………
Name husband: ……………………………………………………………………………
Address (full details): ………………………………………………………………………
………………………………………………………………………………………………
……………………………………………………………………………………………
……………………………………………………………………………………………..
Nearby post office: ………………………………………………………………………
……………………………………………………………………………………………

Location particulars:
near temple.………………….. near mosque…………………………………….
near church.………………….. near junction……………………………………
name important nearby person…………………………………………………………
other……………………………………………………………………………………

General information woman

A. Age at delivery: …………..years
B. Estimated monthly income: Rs………………
                  3. Christian 4. other (specify): …………………
D. Place of residence: 1. rural 2. urban 3. semi-urban
E. Number of years married: ……………………..years
F. Whether treated for infertility this pregnancy:  1. yes  2. no

Obstetric history and previous obstetric history
G. Case status
   i. Case status:  1. booked  2. booked outside  3. non booked
   ii. If booked outside, from which hospital?
       Name and place hospital:  …………………………………………………
   iii. If booked outside, for what indication referred to S.A.T. Hospital?
       Indication:  …………………………………………………………………
H. First day of last menstrual period (L.M.P.):  …………………
I. Cycle:  1. regular  2. irregular
J. Expected date of delivery (E.D.C.):  …………………
K. Gravida (G):  ………
L. Parity (P):  ………
M. No. of previous live births:  …………………
N. No. of living children (L):  …………………
O. No. of previous spontaneous abortions (< 28 weeks of gestation):  …………………
P. No. of previous MTPs (induced abortions):  …………………
Q. No. of previous ectopic pregnancies:  …………………
R. No. of previous vesicular moles:  …………………
S. No. of previous stillbirths (≥ 28 weeks of gestation):  …………………
T. No. of previous neonatal deaths (< 28 days after birth):  …………………
U. No. of previous preterm births (< 37 weeks of gestation):  …………………
V. No. of previous children weighing < 2,000 g at birth:  …………………
W. No. of previous children weighing 2,000 - < 2,500 g at birth:  …………………
X. Previous births with congenital anomalies
   i. No. of previous births with congenital anomalies:  …………………
ii. If any, type of anomaly (may be more than one):
   1. chromosomal
   2. neural tube defect
   3. congenital heart anomaly
   4. other: 

Y. Last day of previous pregnancy
   i. Date: 
   ii. Or, time ago since termination: years / months

Z. Previous live birth
   i. Date of live birth: 
   ii. Or, time ago since live birth: years / months

General health woman
AA. Height: cm

AB. Pre-existing maternal health problems (may be more than one):
   1. none
   2. diabetes mellitus
   3. hypertension
   4. heart disease
   5. other(s): 

AC. Use of medication (related to pre-existing health problems)
   i. Use of medication: 1. yes 2. no
   ii. If so, sort of medication (if known): 
   iii. Indication for use of medication (if known): 

AD. Blood group and rhesus:
   1. A+
   2. B+
   3. AB+
   4. O+
   5. A-
   6. B-
   7. AB-
   8. O-

Present pregnancy: antenatal care
AE. Total number of antenatal visits: 
AF. Total number of ultrasound scans (USS): 

### Antenatal visits

<table>
<thead>
<tr>
<th>Order</th>
<th>Date (i)</th>
<th>Gestational week (ii)</th>
<th>F.H. (iii)</th>
<th>B.P. (iv)</th>
<th>Weight in kg (v)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG</td>
<td>1st</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AH</td>
<td>2nd</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI</td>
<td>3rd</td>
<td></td>
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<tr>
<td>AJ</td>
<td>4th</td>
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<tr>
<td>AK</td>
<td>5th</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AL</td>
<td>6th</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AM</td>
<td>7th</td>
<td></td>
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<td></td>
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<td>AN</td>
<td>8th</td>
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<td>AO</td>
<td>9th</td>
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<td>AP</td>
<td>10th</td>
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<td>AQ</td>
<td>11th</td>
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<tr>
<td>AR</td>
<td>12th</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>AS</td>
<td>13th</td>
<td></td>
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</tr>
<tr>
<td>AT</td>
<td>14th</td>
<td></td>
<td></td>
<td></td>
<td></td>
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### Ultrasound scans

<table>
<thead>
<tr>
<th>Order</th>
<th>Date (i)</th>
<th>Gestational age on basis of USS (ii)</th>
<th>Congenital anomaly (iii)</th>
<th>Type of anomaly (iv)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>1st</td>
<td></td>
<td></td>
<td>yes / no</td>
</tr>
<tr>
<td>AV</td>
<td>2nd</td>
<td></td>
<td></td>
<td>yes / no</td>
</tr>
<tr>
<td>AW</td>
<td>3rd</td>
<td></td>
<td></td>
<td>yes / no</td>
</tr>
</tbody>
</table>
Supplements and TT doses

AX. Folic acid
   i. Folic acid supplements:  1. yes   2. no
   ii. Date: ……………………. 

AY. Iron
   i. Iron supplements:  1. yes   2. no
   Date: ……………………. 

AZ. Calcium
   i. Calcium supplements:  1. yes   2. no
   ii. Date: ……………………. 

BA. Number of TT doses: ………………

Urine tests and Hb%

BB. Total number of urine tests (in file): ………………

<table>
<thead>
<tr>
<th>Order</th>
<th>Date (i)</th>
<th>Gestational week (ii)</th>
<th>Albumin (iii)</th>
<th>Sugar (iv)</th>
</tr>
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<tbody>
<tr>
<td>BC</td>
<td>1st</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BD</td>
<td>2nd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td>3rd</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BF. Total number of times Hb% was measured (in file): ………………

<table>
<thead>
<tr>
<th>Order</th>
<th>Date (i)</th>
<th>Gestational week (ii)</th>
<th>Hb% in gr/dl (iii)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BG</td>
<td>1st</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BH</td>
<td>2nd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI</td>
<td>3rd</td>
<td></td>
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Glucose tests

<table>
<thead>
<tr>
<th></th>
<th>Performed? (I)</th>
<th>Results (ii)</th>
<th>Date (iii)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BJ</td>
<td>1st GCT</td>
<td>yes / no</td>
<td></td>
</tr>
<tr>
<td>BK</td>
<td>2nd GCT</td>
<td>yes / no</td>
<td></td>
</tr>
<tr>
<td>BL</td>
<td>1st GTT</td>
<td>yes / no</td>
<td></td>
</tr>
</tbody>
</table>

In case of GCT, > 140 g/dl is regarded as abnormal.
**Other tests**

BM. HBsAg:  1. positive  2. negative

BN. V.D.R.L.:  1. reactive  2. non reactive

Present pregnancy: complications  1. yes  2. none

BO. Pregnancy induced hypertensive disorder:
   i. Sort of disorder:  1. none  2. PIH
   3. impending eclampsia  4. eclampsia
   ii. Date of diagnosis: ....................
   iii. Or, gestational week of diagnosis: ..........

BP. Gestational diabetes:
   i. 1. none  2. present
   ii. Date of diagnosis: ....................
   iii. Or, gestational week of diagnosis: ..........

BQ. Anaemia:
   i. 1. none  2. present
   ii. Date of diagnosis: ....................
   iii. Or, gestational week of diagnosis: ..........

BR. Antepartum haemorrhage (APH):
   i. 1. none  2. present
   ii. Date of diagnosis: ....................
   iii. Or, gestational week of diagnosis: ..........  
   iv. If present, cause of APH:
       1. placenta praevia, type.............
       2. abruptio placentae, grade...........
       3. other(s): .........................

BS. Other complications (may be more than one):
   1. none  2. oedema  3. rhesus iso-imunization
   4. hydramnios  5. malaria  6. hepatitis B
   7. jaundice  8. other(s): ........................
Delivery

BT. Induction of labour
   i. Induction of labour: 1. yes  2. no
   ii. If so, mode of induction: 1. PGE$_1$  2. PGE$_2$
        3. Normal saline  4. ARM
        5. Pitocin  6. other: ………
   iii. If so, indication for labour induction: ………………………………………

BU. i. Complications during delivery that increase risk for child (may be more than
     one): 1. none  2. PROM  3. PPROM
     4. asphyxia  5. maternal fever  6. chorioamnionitis
     7. preterm labour  8. meconium stained fluid
     9. other(s): ……………

     ii. In case of meconium stained fluid: 1. light  2. moderate  3. thick

BV. Date of delivery: ……………2000

BW. Time of delivery: …………hours am / pm

BX. Nature of labour: 1. normal  2. abnormal

BY. Presentation and position:
     1. vertex  2. face  3. brow  4. breech
     5. transverse  6. compound  7. other: ……………

BZ. Mode of delivery
   i. Mode of delivery:
       1. vaginal, normal  2. assisted breech  3. breech extraction
       4. forceps  5. vacuum extraction  6. caesarean section
       7. other: ……………

   ii. Indication, in case of forceps, vacuum extraction, or caesarean section:
       …………………………………………………………………………

   iii. In case of CS, type of anaesthesia: 1. EA  2. SA  3. GA

iv. Episiotomy: 1. yes  2. no

v. In case no episiotomy was performed:
    1. perineum intact  2. 1st degree perineal tear
    3. 2nd degree perineal tear  4. complete perineal tear
Newborn

CA. Sex:  1. male  2. female  

CB. Status of newborn:  1. born alive  2. born still (fresh stillbirth)  3. born macerated  4. other: ……………..  

CC. Weight: …………grams  

CD. Calculated gestational age on the basis of LMP: …………..weeks  

CE. Calculated gestational age on the basis of ultrasound: …………..weeks  

CF. Gestational age on the basis of external appearance and neurological assessment by paediatrician: …………..weeks  

CG. If born alive, Apgar score: at 1 minute…………… at 5 minutes……………  

CH. Congenital anomalies  
   i. Congenital anomalies detected immediately after birth: 1. yes  2. no  
   ii. If so, type of congenital anomaly (may be more than one):  
      1. Down Syndrome  2. spina bifida  3. anencephaly  
      4. encephalocele  5. hydrocephalus  6. congenital heart anomaly  
      8. other(s)…………………………..  

CI. Birth injury or trauma  
   i. Birth injury or birth trauma: 1. yes  2. no  
   ii. Type of injury or trauma: ……………………………..  

Postnatal

CJ. Sterilisation after delivery: 1. yes  2. no  

CK. Date of discharge mother: ……………….  

CL. If born alive, follow up on child:  
   i. Did the child have BCG and OPV (before discharge): 1. yes  2. no  
   ii. Child:  1. died  2. moved  3. discharged from SATH  
   iii. Date of death / move / discharge: ……………………..  
   iv. In case of death, time of death: ………….hours am / pm  
   v. In case of death, cause of death: ……………………..  
   vi. If moved, moved to:  
      1. In Born Nursery  2. Sick Nursery  3. Dept. of Paediatric Surgery
PART B
REGISTRATION FORM FOR DATA FROM NEONATAL RECORD
Sri Avittam Thirunal Hospital, Trivandrum, 2000

Identification
Pro Forma number: …………………… □ Case sheet seen on: …………
I.P. number baby: …………………… □ Discharged / died ?
Admitted to: IBN / SN / ICU / Paed. Surgery □ Postnatal card given?
Sex: male / female □ Data entered in computer?
Date and time of birth: …………………………………………………………………………….
Date and time of admission: ………………………………………………………………………
I.P. number mother: ………………… O.R. number: ……………………………
Name of mother: …………………………………………………………………………………
Next medical check-up on: …………… Follow up needed until: ……………

CM. Birth weight: ……………..kg
CN. Apgar score: at 1 minute………….. at 5 minutes…………
CO. Gestational age based on external appearance & neurological assessment:…………
CO. Impression: 1. preterm 2. near term 3. term 4. postterm
CP. Impression: 1. SGA 2. AGA 3. LGA
CQ. Indication for admission: ………………………………………………………………
…………………………………………………………………………………………
CR. Congenital anomalies:………………………………………………………………
CS. Other: ……………………………………………………………………………………
CT. i. Follow up: 1. discharged 2. death 3. still in hospital
   ii. Date of discharge or death: …………. 2000
   iii. Time of death: ……………….hours am / pm
   iv. Age at death: ……………….days / hours
   vi. Causes of death: ………………………………………
   or as on death certificate: (a)…………………………………………
   due to, or as a consequence of (b) ………………………………………
   due to, or as a consequence of (c) ………………………………………
   other significant condition contributing to the death: (d)…………………………
Appendix G
Translation of the postnatal card

Below is a translation of the postnatal card. The card was written in Malayalam. However, all words in *italics* (below) were in English and were to be filled out by the researchers/research assistant.

**POSTNATAL CARD**
*SAT Hospital, Trivandrum*

When your child reaches 28 days, please answer the following questions and return to us in the enclosed envelope. In addition, you are advised to visit the Family Welfare Department after the 42\textsuperscript{nd} day of your delivery on Tuesdays or Fridays between 10 and 12 o’clock.

*Pro forma number:*
*Date of delivery:*
*Sex of child: male/female*
*Birth weight:*
*Date of discharge of mother:*
*Date of discharge of child:*

1. Did your baby experience any disease in the first 28 days? yes / no
2. If yes, how many times?
3. What type of disease occurred? How long did it last?
   
<table>
<thead>
<tr>
<th>disease</th>
<th>duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>…………</td>
<td>…………days</td>
</tr>
<tr>
<td>…………</td>
<td>…………days</td>
</tr>
<tr>
<td>…………</td>
<td>…………days</td>
</tr>
</tbody>
</table>
4. Did you take your child to hospital? yes / no
5. If yes, how many days?
6. What was the condition of the child at the time of discharge?
   healthy / not discharged
7. Date of discharge: ………………….
8. We pray for your child’s better health. Also, if something happens to the child, please fill out the following.
   Cause of death: ………………………..
   Which day: ………………………..

Thank you for your co-operation.