Newborns are perhaps the most vulnerable population the world over. Preterm or babies born too early, less than 37 weeks gestation, are particularly at risk. Currently, prematurity is the leading cause of death among children under five around the world, and a leading cause of disability and ill health later in life. Sub-Saharan Africa and south Asia account for over 60 percent of preterm births worldwide. Of the fifteen million babies born too early each year, more than one million die due to complications related to preterm birth. Low birth weight (newborns weighing less than 2,500 grams at birth), due to prematurity and/or restricted growth in utero, is also a major contributor of newborn and child deaths, as well as disability and non-communicable diseases globally.

Nearly 85 percent of preterm babies are born between 32 and 37 weeks gestation and most of these babies do not need intensive care to survive. Solutions to improve the survival and health of vulnerable preterm and low birth weight babies exist. Essential newborn care (drying, warming, immediate and exclusive breastfeeding, hygiene and cord care) as well as basic care for feeding support, infections and breathing difficulties can mean the difference between life and death for small babies. More effort is needed to identify women at risk of preterm labor and support them to give birth in a health facility that can offer extra care when needed, such as support for adequate feeding with breast milk, continuous skin to skin contact, antibiotics, and antenatal corticosteroids. To do this, it is critical that families, communities and health care workers value small babies so that they receive the life-saving care they need. To turn the tide on these preventable deaths, we need action across the spectrum of care from adolescence and preconception, pregnancy, the safe management of labor and delivery, and effective immediate and later postnatal care.

Current, local data are crucial to inform priorities and drive scale-up. This national level profile provides the most current national-level information on the status of prevention and care for preterm birth and low birth weight in Pakistan. Data presented highlight a number of risk factors relevant to preterm and low birth weight in Pakistan as well as the coverage of important care for women and newborns from pregnancy, labor and delivery and the postnatal period. There is also information that provides insights into the health workforce, health policies, health information and community mobilization relevant to preterm birth and low birth weight.

The information provided here can be used to understand the current situation, increase attention to preterm births in Pakistan and to inform dialogue and action among stakeholders. Data can be used to identify the most important risk factors to target and gaps in care in order to identify and implement solutions for improved outcomes.

Much is already being done to prevent preterm birth and low birth weight and to improve outcomes for small babies. A safe and healthy start to life is at the heart of human capital and economic progress in every country, making care for small babies an essential investment in both the short- and long-term. As government leaders, civil society organizations, health workers, families, communities and other partners come together to enact change, we can prevent babies from being born too early and too small, and ensure that small babies get the critical life-saving care and nurturing they need.

**In Pakistan, 860,000 babies are born too soon each year and 101,600 children under five die due to direct preterm complications.**

**Pakistan - National Clinical Standards for Care of Preterm Newborns at the Hospital Level**

- ACS
- Tocolytics
- Magnesium Sulfate
- Antibiotics for pPROM
- No antibiotics w/ intact membranes
- Vaginal birth preference
- KMC
- CPAP for RDS
- Safe oxygen
- Surfactant

*Based on the 10 elements of care recommended by WHO for improved preterm birth outcomes.*
RISK FACTORS FOR PRETERM BIRTH

- Adolescent birth rate per 1,000 girls: 48
- Birth interval <24 months: 14%
- Short stature among women of childbearing age: 5%
- Anemia among women of childbearing age: NO DATA
- Obesity in women of childbearing age: 40%
- Adult diabetes prevalence: 11%

27% Hypertension in women
<1% Adult HIV prevalence
6% Tobacco use amongst women
55% Households with place to wash hands, soap and water
62% Solid fuel used for indoor cooking
11% Violence during pregnancy

Reproductive Health & Care During Pregnancy

- Contraceptive prevalence rate (all methods): 35%
- Net need for birth spacing: 9%
- At least 1 antenatal care visit: 73%
- 4+ antenatal care visits: 37%
- First antenatal care visit <20 weeks: 42%
- ITN use in pregnancy: NO DATA
- HIV+ pregnant women receiving ARVs: 3%
- Pregnant women <34 weeks receiving ACS for threatened preterm labor: 100%

Birth & Postnatal Care

- Births attended by skilled attendant: 52%
- Births by caesarean section: 14%
- Infants weighed at birth: 12%
- Newborns initiated on KMC: NO DATA
- Early initiation of breastfeeding within 1 hour: 18%
- Exclusive breastfeeding up to 6 months: 38%
- PNC within 2 days (mothers): 60%
- PNC within 2 days (newborns): 43%

Publications

- Adolescents & Maternal Health, University of California, 2019
- Health and Nutrition in Pregnancy and Childhood, World Health Organization, 2020

Health Facility Readiness

- Delivery facilities with ACS in stock: NO DATA
- Delivery facilities with space designated for KMC: NO DATA

Health Workforce

- Number of physicians, nurses and midwives per 10,000 population: 4.0
- Clinical standards for preterm care at hospital level: 4/10
- Nursing students receive formal education in neonatal care: ✔

Health Policy

- National plan for RMNCH: ✔
- RMNCH plans include preterm component: ✔
- Policy for kangaroo care: ✔
- Policy for antenatal corticosteroids use: ✔
- Policy for safe oxygen use and CPAP: ✔

Health Information

- Perinatal mortality audit in policy: ✔
- Birthweight captured in health management information system: ✔
- Gestational age captured in health management information system: ✔

Community Engagement

- National advocacy group for parents of preterm babies: ✔
- Preterm included in national RMNCH behavior change strategy: ✔

www.EveryPreemie.org
DEFINITIONS AND DATA SOURCES

DEMOGRAPHICS

Total population
Data from UN Population Division. (1)

Annual number of live births
Data from UN Population Division. (1)

Total fertility rate
Number of children who would be born per woman if she lived to the end of her childbearing years and bore children at each age, in accordance with prevailing age-specific fertility rates. (1)

Maternal mortality ratio
Number of deaths of women from pregnancy-related causes per 100,000 live births during the same time period. (2)

Annual number of maternal deaths
Number of deaths of women from pregnancy-related causes. (2)

Stillbirth rate
Probability of third trimester stillbirths (~100 g birthweight or ≥28 weeks of gestation), expressed per 1,000 births. (3)

Annual number of stillbirths
Number of stillbirths (~1000g birthweight or ≥28 weeks of gestation). (3)

Neonatal mortality rate
Probability of dying between 0 to 28 days expressed per 1,000 live births. Numbers in parentheses refer to national household survey mortality estimates. (4, 9)

Annual number of neonatal deaths
Number of children who die during the first 28 completed days of life. (4)

Infant mortality rate
Probability of dying between 0 to 365 days expressed per 1,000 live births. Numbers in parentheses refer to national household survey mortality estimates. (4, 9)

Annual number of infant deaths
Number of children who die during the first year of life. (4)

Under-5 mortality rate
Probability of dying between birth and exact 5 years of age, expressed per 1,000 live births. Numbers in parentheses refer to national household survey mortality estimates. (4, 9)

Annual number of under-5 deaths
Number of children who die between birth and exact 5 years of age. (4)

HEALTH FACILITY READINESS

Delivery facilities with antenatal corticosteroids in stock
Percentage of facilities conducting deliveries with either dexamethasone or betamethasone in stock. (No data)

Delivery facilities with neonatal bag and mask in stock
Percentage of facilities conducting deliveries with ambu bag and neonatal size mask in stock. (No data)

Delivery facilities with space for kangaroo mother care
Percentage of facilities conducting deliveries with space designated for kangaroo mother care. (No data)

HEALTH INFORMATION

PERINATAL MORTALITY AUDIT IN POLICY
National policy on RMNCAH
Yes: Cooled plan or plans to scale up maternal, newborn and child health interventions available at the national level. / Partial: Cooled implementation plan available but not for all components. / No: No cooled implementation plan for maternal, newborn and child health interventions available. (12)

RMNCAH plans include preterm components
Yes: RMNCAH strategy includes mention of any critical elements of preterm care. / No: No mention of any critical elements of preterm care. (13)

Policy for MMC
Yes: National policy recommends Kangaroo Mother Care for low birth weight newborns. / No: National policy does not recommend Kangaroo Mother Care for low birth weight newborns. (14)

Policy for ACS use
Yes: National policy recommends use of antenatal corticosteroids for preterm labor. / No: National policy does not recommend use of antenatal corticosteroids for preterm labor. (14)

Policy for safe oxygen use and CPAP
Yes: National policy specifies safe oxygen use when continuous positive airway pressure is administered. / No: National policy does not specify safe oxygen use. (13)

COMMODITY ENGAGEMENT

National advocacy group for parents of preterm babies
Yes: Existence of at least one support group for parents and family members affected by preterm birth. / No: No group information available. (13)

Preterm included in national RMNCAH behaviour change strategy
Yes: Messages regarding preterm birth are included in national strategy. No: National behavior change strategy does not include preterm birth messages OR no national behavior change strategy. (13)

DATA SOURCES:
8. Data from latest national service provision assessment or service availability and readiness assessment.
13. Data from Every Preemie-Scale country stakeholder interviews and document review. 2015.