EVERY WOMAN
EVERY CHILD

EVERY NEWBORN

Progress towards ending preventable newborn deaths and stillbirths

SPOTLIGHT ON PAKISTAN

Pakistan's Punjab province provides an example of how, with a decentralized government system, one province has prioritized newborn programming and engaged local stakeholders to accelerate progress towards newborn survival. Using a bottleneck analysis, provincial needs and existing barriers to the scale-up of interventions were identified. High-impact interventions are being systematically introduced throughout the province, which include building skills to resuscitate newborns, the introduction of chlorhexidine for cord care, and the introduction of Kangaroo Mother Care for preterm babies. Local language training materials and other dedicated resources are being used to support focused training across the spectrum of health care professionals; Lady Health workers, community midwives, and midwives and doctors at health facilities.

World Health Organization

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COMMITTING TO CHILD SURVIVAL
A PROMISE RENEWED

National Context

Estimated population: 191 million

Newborn mortality rate (NMR): 46 per 1,000 live births [1]

Stillbirth rate: 42 per 1,000 births [2]

Newborn deaths as a percentage of all under-5 mortality: 56 per cent [3]

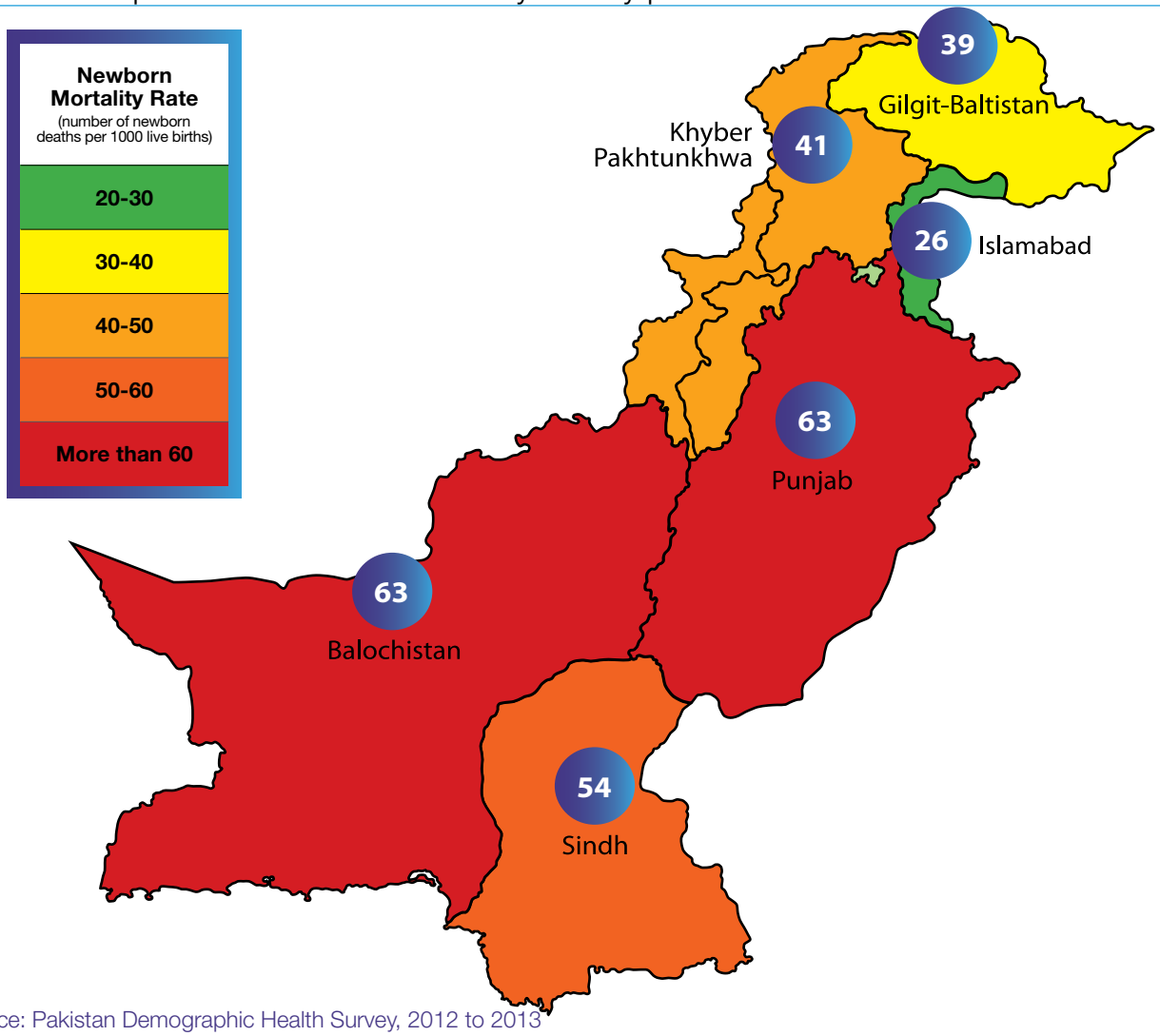
Causes of newborn mortality

In Pakistan, 57 per cent of newborn deaths occur within 72 hours after birth, the majority happening in the first 24 hours. Health statistics are limited but evidence suggests that 90 per cent of newborn deaths are due to complications caused by premature birth (37 per cent), complications during delivery (25 per cent) or severe infection (28 per cent).[4]

Critical disparities in newborn survival

There are enormous disparities in the chances of survival for Pakistani babies based on their province and district of birth. The most (Punjab) and least (Balochistan) populated provinces have the same high newborn mortality rate while the federal capital (Islamabad) has a rate almost two-thirds lower, less than half of the national NMR average of 46 per 1000 lives births. See Figure 1.

Figure 1: Disparities in newborn mortality rate by province



Source: Pakistan Demographic Health Survey, 2012 to 2013

[1] United Nations Inter-Agency Child Mortality Estimates, 2015. Levels and Trends in Child Mortality, Report 2015, UNICEF, New York

[2] S. Cousens, H. Blencowe, C. Stanton, D. Chou, et al., "National, regional, and worldwide estimates of stillbirth rates in 2009 with trends since 1995: a systematic analysis," The Lancet 377 (9774): p.1319–1330, April 2011.

[3] United Nations Inter-Agency Child Mortality Estimates, 2015. Levels and Trends in Child Mortality, Report 2015, UNICEF, New York

[4] Pakistan Demographic Health Survey, 2012 to 2013

Identifying barriers: National consultation and bottleneck analysis

Pakistan is now systematically expanding specific interventions to end preventable newborn mortality. Part of what triggered these efforts was a bottleneck analysis, a component of the global ENAP process to understand the challenges of scaling-up newborn interventions. The main bottlenecks identified included lack of health care personnel, lack of supplies and equipment, over-complicated procedures, and cultural practices.

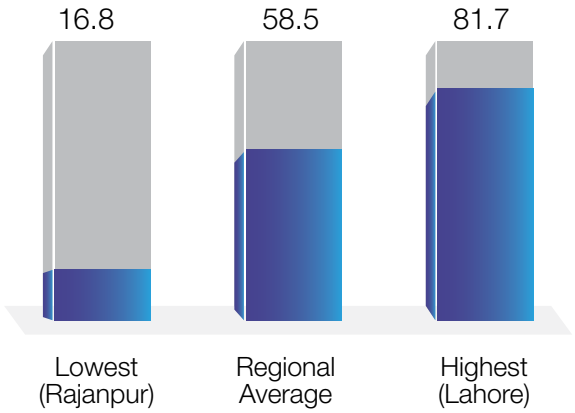
Provincial consultations on how to scale-up newborn programmes were held in 2013. Each province identified bottlenecks and challenges in their newborn health system. These fed into a national consultation in Islamabad in 2013 that consolidated results and recommendations from the provinces and coordinated efforts among national newborn care stakeholders. Since 2011, Pakistan's Ministry of Health has been decentralizing many health services, functions and responsibility for policy direction and planning to the provincial governments. Each province has designated funding from the national budget, based on population size and development indices.

Spotlight on Punjab province

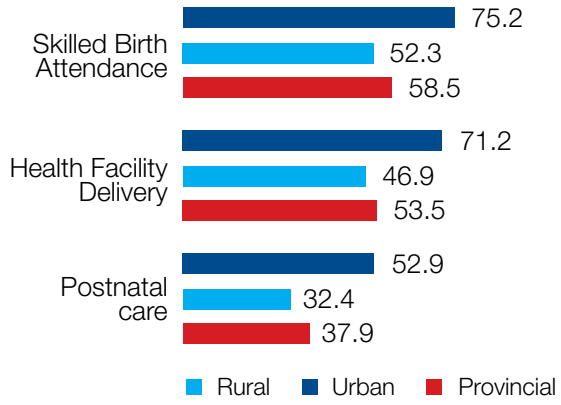
Punjab is a prime example of a province that is making great strides to scale-up newborn care thanks to a government-led systematic process to engage key stakeholders in identifying needs and implementing actions. Punjab has prioritized newborn health and without delay has focused on a few key interventions that will save hundreds of lives each year.

Punjab is Pakistan's most densely populated province, with 101 million people, half the population of Pakistan. The NMR is 63 per 1,000 live births. There is significant variation in health care access within Punjab, and rural households have lower access to lifesaving care. For example, while four out of five births benefit from a skilled birth attendant (SBA) in Lahore, the best performing district, this drops to less than one out of five in the lowest performing district, Rajanpur. See Figure 2.

Figure 2: Disparities in access to care by district and household residence



Inter-district disparities in SBA coverage



Disparities in key care interventions by rural/urban residence

Source: Multiple Indicator Cluster Survey, UNICEF, 2011

Identifying provincial bottlenecks to the scale-up of newborn care

The Punjab bottleneck analysis indicated that the main interventions with severe obstacles to scale-up were the treatment of severe neonatal infections, inpatient care for small and sick babies, Kangaroo Mother Care (KMC) and skilled birth attendance. Leadership and health financing were the health systems building blocks with the most major challenges. The lack of a skilled and motivated health workforce, the lack of essential medicines and products, and poor quality of services were also identified as significant challenges to the delivery of newborn interventions.

Figure 3: Newborn bottleneck analysis for Punjab province

Intervention	Health system building blocks						
	Leadership and governance	Health financing	Health workforce	Essential medical products and technologies	Health service delivery	Health management information system	Community ownership and partnership
Skilled care at birth							
Basic emergency obstetric care							
Comprehensive emergency obstetric care							
Basic newborn care							
Management of preterm birth							
Neonatal resuscitation							
Kangaroo Mother Care							
Treatment of severe infections							
Inpatient care for sick and small babies							

KEY	Minor bottleneck	Significant bottleneck	Very major bottleneck	Incomplete data

Targeting key, cost-effective, lifesaving interventions

Using the bottleneck analysis findings, the provincial priorities have focused on improving leadership, governance and health financing for newborn programmes, especially in the treatment of severe infections, introducing Kangaroo Mother Care, implementing neonatal resuscitation when needed and providing inpatient care for small and preterm babies.

Key intervention 1: Treatment of severe infections

Newborn infections account for one in five newborn deaths in Punjab, with most of these caused by unclean instruments used for cutting the cord or applying different substances to the cord stump in line with traditional beliefs and practices. Based on the bottleneck analysis, the Integrated Reproductive, Maternal, Newborn and Child Health Programme (IRMNCH) and Department of Health incorporated using chlorhexidine digluconate gel for postnatal umbilical cord care in October 2014. This lifesaving drug is now included in both the provincial and national government's essential drugs list, and two Punjab pharmaceutical companies are being registered to undertake the local manufacture.

To further expand the use of chlorhexidine for cord care, Punjab health authorities have carried out the following measures:

- Adapted the WHO 2014 guidelines for chlorhexidine application for cord care
- Developed chlorhexidine training in both public and private clinics and in the Essential Newborn Care reference manual, with the support of UNICEF and in collaboration with the Institute of Child Health, WHO and Save the Children
- Developed communication tools to raise awareness and demand for care among communities and to guide midwives and mothers in the appropriate use of chlorhexidine
- Introduced chlorhexidine for cord care in three districts with the plan to expand throughout Punjab by 2016
- Translated training and communication materials into Urdu for Community Midwives and Lady Health Workers
- Held Training of Trainers workshops to create a pool of master trainers. Cascade training is now underway and the aim is to train 800 health care providers from 265 health facilities by 2016
- Planned an operations research project on the introduction of chlorhexidine which will further inform scale-up efforts

Key intervention 2: Introducing Kangaroo Mother Care

Preterm births account for 37 per cent of all newborn deaths in Pakistan. KMC is a collection of interventions, specifically for preterm babies, consisting of continuous skin-to-skin contact with the baby placed on the caregiver/mother's bare chest, and frequent, exclusive breastfeeding or breastmilk feeding. A group of neonatologists from Lahore will attend KMC training in India in October 2015 to enable them to implement KMC in the local children's hospital in Lahore, then train district teams throughout Punjab and other provinces to establish KMC.

Key intervention 3: Neonatal resuscitation

Twelve per cent of newborn deaths in Pakistan are attributed to birth asphyxia which is easily treated through neonatal resuscitation using a simple device consisting of a bag and mask. The bottleneck analysis identified significant challenges to delivering neonatal resuscitation across all levels of the health system. In Punjab, UNICEF collaborated with the IRMNCH Programme to run a training of trainers for Helping Babies Breathe and an Emergency Obstetric and Neonatal Care training for providers in health facilities. The training started in seven districts in 2013 and expanded to 20 districts in 2014. In 2015, all 36 districts have training completed or underway. The goal is to train 17,623 healthcare professionals in Punjab by 2016.

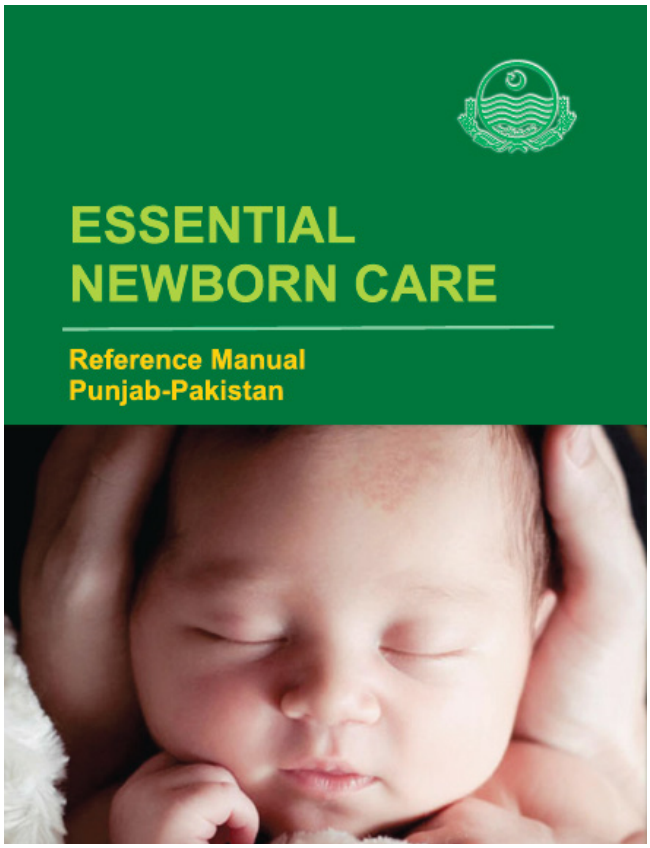
Key intervention 4: Inpatient care for small and sick babies

Twenty-six per cent of babies in Punjab are classified at birth as low birth weight putting them at greater risk of dying due to hypothermia and feeding problems. In April 2015, neonatologists and staff from the Ministry of Health and representatives from UNICEF, Save the Children and USAID's Maternal and Child Survival Programme participated in a regional Helping Babies Survive workshop that addressed effective management of a sick newborn care unit. After the workshop, the participants from Punjab agreed that the skills-learning component of Helping Babies Survive would be adapted and incorporated into the Punjab Essential Newborn Care training manual. A follow-up meeting will develop a plan for provincial capacity-building to fill gaps, moving forward, to ensure the quality of newborn facility care.

Sharing provincial and national commitment and knowledge

In March 2014, Punjab hosted the first International Neonatology Conference with the theme 'Saving our future by saving our newborns'. Bringing provincial, national and international newborn health experts together in Punjab sparked local and national interest in addressing the high level of newborn deaths. The conference highlighted the extremely high neonatal death burden for the media and general public. A popular national newspaper published an article on the conference, calling on the government to accelerate action to scale-up these practical, affordable interventions.[5]

The conference provided a platform for action. Subsequent to the conference, a provincial group of experts came together to develop the Provincial Essential Newborn Care Reference Manual and the Essential Newborn Care training manual to replace the multiple manuals in use. These training manuals are being developed in local language for all types of health care providers, including health facility staff and community midwives. Other provinces are adopting this manual for their use.



Conclusion

Punjab has shown remarkable leadership in introducing high-impact interventions throughout the province. Implementation strategies have been tailored to local needs and concerted efforts are being made to reach rural populations with the greatest deprivation. Context-specific strategies that are being employed include the capacity-building of Lady Health Workers and community-based midwives in the administration of chlorhexidine for cord care, and the local manufacturing of this lifesaving drug. In addition, paediatricians, obstetricians and nurses are receiving training in KMC, and later this will be provided to all concerned health facility and community staff. These efforts, plus the development of the newborn care reference and training manuals in local languages, reflect the committed leadership to prioritize newborn programming and accelerate newborn survival.

[5] Express Tribune (2014, March 10). Pakistan's Infant Mortality rate the highest in the world.

ABOUT EVERY NEWBORN

The global Every Newborn Action Plan (ENAP) was endorsed by the 194 Member States of the World Health Organization at the World Health Assembly (WHA) in 2014. It is supported by a WHA resolution that requests the regular monitoring of progress of the ENAP goals and targets and for the WHO Director General to report periodically to the WHA on progress until 2030. It aims to support countries to reach the target of fewer than 12 newborn deaths per 1,000 live births and 12 stillbirths per 1,000 births by 2030. ENAP was developed based on evidence published in the 2014 Lancet Every Newborn Series and consultations with many Member States, organizations and individuals. ENAP provides guidance to policy makers and programme managers on refining national newborn policy and programmes within the context of wider reproductive, maternal, newborn and child health strategies. ENAP is closely linked to Strategies Towards Ending Preventable Maternal Mortality.

Strategic objectives

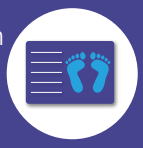
1. Strengthen and invest in maternal and newborn care during labour, birth and the first day and first week of life

2. Improve the quality of maternal and newborn care

3. Reach every woman and newborn to reduce inequities

4. Harness the power of parents, families and communities

5. Count every newborn through measurement, programme-tracking and accountability



Acknowledgements

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Image 4: Personal photo by Nabila Zaka during Helping Babies Breathe Training in Lahore, 2014.
Image 5: From Essential Newborn Care Reference Manual, Punjab, Pakistan

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- Progress towards ending preventable newborn deaths and stillbirths: Spotlight on Ghana
- Progress towards ending preventable newborn deaths and stillbirths: Spotlight on Myanmar
- Progress towards ending preventable newborn deaths and stillbirths: Spotlight on the Philippines

For more information

See the Every Newborn website: www.everynewborn.org.