Examples from the field:

Improving maternal and newborn survival

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Examples from the field:

Improving maternal and newborn survival

AFGHANISTAN

Challenges and a way forward for newborn care in Afghanistan

In Afghanistan, the neonatal mortality rate (NMR) is high at 36/1000 live births. Newborn mortality accounts for 45 per cent of infant deaths. Major causes of newborn deaths include infection, asphyxia, preterm complications and low birth weight. The annual rate of reduction in the NMR is 0.1 per cent, though a rate of 5.2 per cent would be required for Afghanistan to achieve its 2035 NMR target[1]. While essential maternal and newborn interventions have been included in health services delivery packages in Afghanistan since 2003, newborn interventions are not widely implemented. To gather data on the newborn situation, an assessment of bottlenecks for scaling up of essential new-born interventions was needed.


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A literature review focusing on newborn care interventions and the health system in Afghanistan was conducted. Relevant scholarly articles were retrieved through keyword searches in Google Scholar and PubMed; relevant grey literature was identified and a bottleneck analysis on newborn care was conducted in 2013.

Newborn mortality is related to complex factors, including the weakness of Afghanistan's health system following decades of conflict. Inadequate supply is a major bottleneck for basic newborn care. Most health centres are under-equipped and under-staffed[2]. Challenges exist around the delivery of all nine recommended neonatal essential interventions in Afghanistan's health system. Interventions for preterm births are not in place and major challenges exist around implementation of kangaroo mother care[3]. Many qualitative studies show socio-cultural beliefs, specifically the practice of seclusion of women limit access to appropriate maternal and newborn services.

Despite some progress, persistent weaknesses exist in all health systems around newborn care in Afghanistan, especially relating to supply, demand and quality. Development of a National Newborn Action Plan, guidelines for maternal and perinatal death reviews and a community-based new born care package were some of the outcomes of the assessment. The launch of the "Call to Action for Child Survival" in Afghanistan, under the banner of A Promise Renewed, also demonstrated strong government commitment to reducing unacceptably high levels of newborn mortality. As work continues, the health system needs to be further strengthened in order to achieve higher rates of coverage, with attention to ensuring progress across the continuum of care and strengthening of cross-sectoral approaches.

Acknowledgement: Sherin Varkey, Deepika Attygalle, Malalai Naziri, Khaksar Yousufi, Zelaikha Anwari, Ariel Higgins-Steele

1 Afghanistan National New-born care comprehensive action plan 2014
2 Children and Women in Afghanistan: A situation Analysis 2014
3 Bottleneck analysis on newborn care in Afghanistan 2013

BANGLADESH

Quality Improvement of Sick Newborn Care at Hospitals through Total Quality Management Approach Brings Good results: Findings from selected 'Special Care Newborn Units (SCANUs) at the secondary and tertiary level hospitals in Bangladesh

Despite the significant reduction in under five mortality in Bangladesh, the reduction in newborn mortality has been slow. Bangladesh's newborn mortality rate now stands at 28 per 1,000 live births, with newborn mortality contributing to 61 per cent of all under-five mortality.

[1]Full supportive care of sick newborns within facilities is effective in reducing neonatal mortality in high burden countries[2].

However hospitals at the secondary and tertiary levels of Bangladesh frequently lack adequate facilities for treating newborns in line with nationally-defined standards. Sick newborns are mostly managed in paediatric wards, and do not benefit from lifesaving interventions, often resulting in death.

The Bangladesh Ministry of Health has established 'Special Care Newborn Units (SCANU)' in 13 secondary and eight tertiary-level hospitals, with technical support from UNICEF. UNICEF also supported the introduction of a Total Quality Management approach, 5S-CQI-TQM[3] in 11 hospitals since 2011, including six SCANUs.


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Initial results obtained from Health and Management Information Systems (HMIS) show positive outcomes. The average case fatality rate has decreased from 23 per cent in 2011 to 15.2 per cent in 2014 inmedical college hospitals, while in district hospitals it has decreased from 6 per cent to 2 per cent for the same period[4].

Findings from this intervention demonstrated that concomitant execution of sick newborn care and quality improvement at hospitals led to better neonatal health outcomes.

Acknowledgement: Dr. Md. Ziaul Matin, Co-Author: Dr. Minjoon Kim, Dr. Indrani Chakma, Dr. Lianne Kuppens

1 Bangladesh Demographic and Health Survey, BDHS 2014

2 Lancet 'Every Newborn Series 3': Can available interventions end preventable deaths in mothers, newborn babies, and still-births, and at what cost? Page 12-13

3 5S-CQI-TQM is a step-wise managerial tool/approach to improve working environment and standardise work procedure. 5S stands for Sort, Set, Shine, Standardise and Sustain. CQI: Continuous Quality Improvement or KAIZEN in Japanese, TQM: Total Quality Management.

4 End-line assessment report of Quality Improvement of Newborn Health Care, January 2015.

EGYPT

Strengthening Health Information System through application of Monitoring Results for Equity System (MoRES): Egypt case study

This case study highlights the Ministry of Health (MoH) experience in application of the Monitoring Results for Equity System (MoRES) as a tool for identifying and addressing bottlenecks impeding the effectiveness of maternal, neonatal and child health (MNCH) interventions, through the UNICEF-supported perinatal care program, and targeting the most disadvantaged population groups.

To identify and address bottlenecks, a working group led by the Ministry of Health (MoH) reviewed the MoRES 10-determinant framework. This framework categorizes intervention bottlenecks under four key areas: enabling environment, supply, demand and quality. A list of indicators was then developed to identify specific MNCH bottlenecks. Data was sourced from routine data collected at facility levels. A computerized data entry system was developed by the MoH with built-in checks to reduce data inconsistencies. This system generates reports on facility performance indicators (colour-coded), highlighting poorly-performing facilities. The system provides built-in guidance on potential corrective actions.

The application of MoRES improved the accuracy, flow and utilization of MNCH information for self-assessment and follow-up action. This real-time monitoring system enabled the MoH to identify and address previously unreported bottlenecks. The MoH is currently in the process of scaling up of MoRES to the entire primary health care sector, with potential support from the World Bank.

Scaling up MoRES from a well-controlled, project-based environment, to a wider national health system approach is a challenging task.Based on the MoRES experience, MoH should mobilize resources for developing an institutional M&E/accountability framework, critically review its data management system, allocate more financing at the district level, and build human resource capacity to strengthen MoH institutional capacity for better health coverage and reduction of bottlenecks and inequities.

Acknowledgment: Dr. Magdy El-Sanady

ETHIOPIA

Utilization of community-based newborn care services in rural Ethiopia: A dose-response study

Newborn deaths account for 43 per cent per cent of U5MR in Ethiopia, and newborn infection contributes to one third of these deaths. Provision of services through the Health Extension Worker Program platform is a key strategy to increase utilization of newborn care services. In March 2013 the Ethiopian government launched Community-Based Newborn Care (CBNC) through which community health workers were trained, supplied with essential commodities and supervised on provision of CBNC, including management of newborn infections.

To measure changes resulting from CBNC interventions, particularly with respect to care-seeking behaviours and utilization of community case management of newborn infection services.

Between January and March 2015, data on case load, case detection and treatment for sick young infants with possible serious bacterial infection (PSBI) and local bacterial infection (LBI) were collected from the Sick Young Infant (SYI) registers of 190 health posts that have at least one community health worker trained in CBNC and at least one supportive supervision visit. Regression models were developed to compare measures of performance pre- and post-CBNC.

The likelihood of sick neonates and SYI coming to health posts for CBNC service increased (P=.000) by 96-fold and 75-fold respectively after CBNC implementation. Similarly, case detection improved for PSBI and LBI by 4.6-fold and 12.8-fold respectively (P=.000). After CBNC, 74 per cent per cent of PSBI and all LBI cases started treatment and 94.6 per cent of PSBI and 90 per cent of LBI cases completed their treatment at the health post. Well-coordinated implementation of community-based newborn care services significantly improved care-seeking behaviour, treatment uptake and adherence in Ethiopia.

Acknowledgement: Hailemariam Legesse; Agazi Ameha[1]; Macoura Oulare[1]; Mariame Sylla[1]; Helina Kebede[2]; Ephrem T. Lemango[2]; Luwei Pearson[3]; Mark Young[4]

1 UNICEF Ethiopia
2 Federal Ministry of Health
3 UNICEF Regional Office East and Southern Africa
4 UNICEF New York Headquarters

INDIA

Real time online monitoring system for newborns in India – Measuring for accountability and action

India has strengthened facility-based newborn care by establishing Special New Born Care Units (SNCUs) at district level. SNCUs provide care delay in collating to small and sick newborns with nearly 700,000 treated in 2014. While SNCUs contributed to a reduction in neonatal mortality (20 per cent decline between 2008-2013, Source, SRS) the lack of a comprehensive monitoring and follow-up system providing credible data was a bottleneck for tracking performance, ensuring accountability and informing actions.

UNICEF developed an online monitoring system for the Government of India which records information related to care before and during delivery, both within SNCUs and during follow up. This system generates real-time analysis of data at the click of a button for more than 250 parameters, including admission profile, outcome by weight and maturity, causes of death, antibiotic usage, and comparison between SNCUs. This helps SNCU staff, managers and policy makers to take targeted and timely decisions. Follow-up is continued until one year after discharge, facilitated by reminder SMSs. The cost for scale-up has been budgeted under the National Health Mission.

Currently eight states with 245 SNCUs generate online data covering 600,000 newborns. Scale-up will be completed in 2015 making this one of the largest online data bases for newborn health. The database has helped support monitoring of individual SNCUs, introducing performance based incentives and labor room care, reducing antibiotic usage and establishing a follow up system. The system is now being expanded to cover private sector providers.

Real time data is already helping with monitoring of performance, implementation of timely actions and creation of accountability mechanisms. Setting up such systems at a national scale is feasible. There is need to improve labour room care to improve neonatal outcomes. There is also a need to address low birth weight as these babies have higher mortality in SNCU and after discharge. The system offers a potential solution for a regional neonatal registry system.

Acknowledgments: Dr. Gagan Gupta, Health Specialist UNICEF, Dr. Rakesh Kumar, Joint Secretary RCH Government of India, Dr. Genevieve Begkoyian, Chief Health UNICEF India

INDONESIA

Title: Island cluster approach for improved referral pathways: Making EmOC accessible to vulnerable mothers in Maluku Tenggara Barat (MTB) District, Indonesia

Ensuring equitable access to maternal care in MTB, a remote deprived district of Indonesia remains a challenge. The population of MTB is distributed among 56 islands, with major transport constraints. Consequently, the district hospital, the primary referral facility in this study, was only accessible to 41 per cent of pregnant mothers within three hours. There was therefore a need to revise referral pathways to improve coverage of maternal and neonatal health (MNH) services and ensure timely referral. This study looks at the effectiveness of the revised referral pathways, implemented as part of an 'Island Cluster Approach', in 2011.

An adjustment of referral pathways and reorganization of services was achieved by delinking referral pathways from administrative boundaries in order to improve access to care. Coverage assessment was performed through review and analysis of routine maternal health data. Data analysis included trend analysis and geographical mapping using QGIS Desktop version 2.2.0.

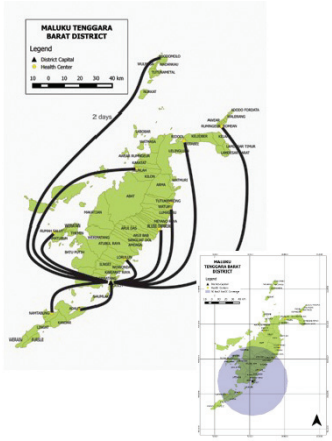
The new referral pathways doubled the geographical coverage of emergency MNH services and a majority of mothers are now within a 50km radius of a referral facility. Travel time to referral facilities has reduced from a maximum of two days to approximately eight hours. This intervention led to an increase in coverage of institutional deliveries from 35 per cent in 2011 to 72 per cent in 2014 and improved access to emergency obstetric care from 56 per cent in 2009 to 72 per cent in 2014. Administrative data suggests that the reported number of maternal deaths in 2014 is half the number in 2009.

Revision of referral pathways and service reorganization to address access to services has successfully addressed a major bottleneck to MNH access in this remote province. However, the involvement of multiple stakeholders beyond the Ministry of Health is needed. The experience described here provides a model for replication in many remote island districts in Indonesia.

Acknowledgements: Bobby Marwal Syahrizal. Karina Widowati, Robin Nandy

INDONESIA

Beyond Boundaries: Revising referral pathways for greater access to EmOC services in remote Eastern Indonesia



Initial referral pathway & Geographical coverage

Impact

Ensuring equitable access and reduced travel time to EmOC service for population in a remote deprived district that has population distributed among 56 islands.

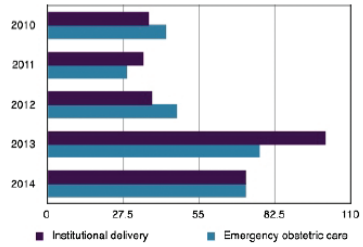
Approach

Islands in the east of the Indonesian archipelego are very dispersed and present major logistic barriers to timely referral of patients for Emergency Obstetric Care (EmOC). Referral pathways designed based on administrative boundaries present challenges due to the large distances between peripheral islands and their respective administrative hubs. The Ministry of Health, supported by UNICEF, facilitated multisectoral and multistakeholder dialogue to redefine referral pathways in Maluku Tenggara Barat (MTB) district and delink them from administrative boundaries to reduce travel time and improve access to EmOC. The approach was assessed through a review of travel time and utilization of maternal health care services during 2011-2014.

Revised referral pathway & Geographical coverage

Result

Travel time to referral facilities from the farthest island has reduced from 2 days to approximately 8 hours. This intervention doubled the geographic coverage that lead to an increase on institutional deliveries from 35% in 2011 to 72% in 2014 and improved access to emergency obstetric care from 56% in 2009 to 72% in 2014.



Coverage of facility birth and EmOC in District of MTB 2010-2014

Conclusion & way forward

Revision of referral pathways and service reorganization successfully addressed a major bottleneck in accessing EmOC service in this remote district. This innovation required the involvement of multiple stakeholders beyond the Ministry of Health and across administrative boundaries. This experience has been replicated to cover a referral pathway model in the overall Province of Maluku and provides a model for replication.

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KENYA

A Web-based MNCH Assessment Tool for establishment of MNH Centres of Excellence across five high burden counties in Kenya

Kenya experienced slow progress in its work to achieve MDG5, with a maternal mortality rate of 360 deaths per 100,000 live births. Kenya's newborn mortality rate also remains high at 22 deaths per 1000 live births. Regional disparities place women and their newborns at heightened risk of poor pregnancy outcomes. Lack of reliable, updated data for each of Kenya's 47 counties means that managers must rely on outdated data for critical decisions.

Kenya's Ministry of Health mobilised partners, including the Clinton Health Access Initiative (CHAI) and UNICEF, and worked together with IT programmers, MNCH specialists and data analysts to develop a web-based tool that generates quick, reliable estimates of health facility performance, using indicators comparable to standard EmONC needs assessment indicators. The tool was used in more than 14 counties, using existing staff making routine supervisory visits. We present the impacts of both the experience collecting and acting on the data.

A comprehensive assessment of all facilities providing delivery services in each county, including hard-to-reach counties, was conducted over the course of five days days,. County supervisors collected data on their personal laptops or tablets and, where internet was not available, using anoffline tool. The inbuilt analysis functionality provided counties, sub-counties and health facilities with snapshots of gaps in service provision and quality, as well sa comparisons across regions. Managers were then able to realign supplies, HRH, commodities and equipment, avoiding wastage. The cost of collecting the data was minimal.

Using affordable and readily available technology, we developed a simple, inexpensive tool to conduct rapid yet comprehensive facility assessments and track service provision and quality on a regular basis. This information can support evidence-based planning and monitoring in a resource poor setting. Such assessments can be conducted regularly and potentially integrated into DHIS systems and other administrative data sources. The tool can supplement, and even potentially replace the more tedious and prolonged conventional surveys.

Acknowledgement: Shiphrah Kuria, Rosemary Kihoto, Khadija Abdalla, Betty Wariari, Wangui Muthigani, Strathmore University, Agnes Nakato, Rachael Nyamai

MALAWI

Multi-agency Collaboration as a Strategy for Improving Quality of Maternal and Newborn Healthcare in Malawi

Efforts to improve both the supply and demand side elements of health systems (e.g., access, availability, and utilization) are key to achieving quality of care (QoC) and effective coverage of key maternal and newborn health (MNH) interventions. In the context of limited financial resources and a constrained health system, collaborative approaches are critical to addressing the numerous and varied bottlenecks that exist.

In 2014, Malawi conducted a landscape analysis in order to identify service delivery bottlenecks and their causes, and to review existing policies that can influence QoC for MNCH. Key stakeholders participating in this exercise included the Ministry of Health, UNICEF, district health management teams, development partners, medical associations and academic institutions. The analysis resulted in identification of priority bottlenecks, along with suggested health system and policy-related strategies and solutions. Further, low performing districts were identified, as were in-country partners with comparative advantages in specific settings. Through UNICEF-led partnership agreements, comprehensive work plans, timelines, and measurements for implementation have been developed. Specifically, the approach involves assigning collaborative partners to the areas of political leadership, regulations and standards, essential commodities, human resources, skills building, geographic access, demand generation, and stakeholder engagement, among others.

Malawi's collaborative approach to improving QoC within MNCH services has promoted synergies between partners, while pooling of resources has improved the efficiency of efforts to address issues that require intensified inputs to influence QoC. Improved partner collaboration has also resulted in the development of standardized tools and methods, streamlined regulations and standards and improvements in resource management and performance management (e.g., scorecards of programme implementation and management). Regular partnership meetings take place on an ongoing basis to promote ongoing collaboration between partners around key issues, including fundraising.

Collaborative partnerships and investments in health systems strengthening can facilitate improved QoC, create efficiencies, and improve integration across the range of key MNH interventions.

Acknowledgements: Fannie Kachale (Director, Reproductive Health, Ministry of Health), Kyaw Aung, Atnafu Asfaw, Ellubey Racheal Maganga (UNICEF)

MALAWI

Innovating for Improved Maternal and Newborn Health Outcomes in Malawi

Following Malawi's move to increasingly devolve the functions of government, districts in Malawi now hold greater authority for resource allocation. Malawi's Ministry of Health promotes a systematic District Health Performance Improvement (DHPI) approach to transforming District Implementation Plans into evidence-based operational plans that support key maternal and newborn health (MNH) interventions. DHPI strengthens performance and accountability for equitable health outcomes, and enables district teams to lead the development, implementation, and monitoring of District Implementation Plans.

Using secondary data on a set of indicators associated with key MNH interventions, district teams conducted bottleneck analyses to guide annual planning.

With support from UNICEF Malawi and Management Sciences for Health, 16 of Malawi's 28 districts used DHPI to support their annual planning. The approach informed Malawi's National Child and Newborn Health Strategy, triggered discussions on the quality of MNH care, influenced the Newborn Action Plan and supported improvements in the Road Map for Maternal Health. Analyses of bottlenecks also spurred district improvements. For example, results from Kasungu showed the extent to which the eastern part of the district was underserved, prompting the district health officer to open additional health centres and clinics. Dedza added regular MNH program review meetings, and Mwanza trained Health Surveillance Assistants in community MNH. A planned evaluation will identify whether DHPI contributes to improved coverage of specific health interventions (e.g. skilled delivery, antenatal care, and immediate essential newborn care at home), as well as promoting more equitable health system performance, and improved district capacity to manage for results and troubleshoot challenges.

Preliminary results indicate that using DHPI resolves bottlenecks in the system, helps to use resources more effectively and efficiently at the district level, and improves coverage of MNH services, leading to better health outcomes for mothers and newborns.

Acknowledgement: Kyaw Aung, Gabriele Fontana (UNICEF); Luis Tam, Sara Wilhelmsen (Management Sciences for Health)

MAURITANIA

Mauritania on its way to Universal Health Coverage for mothers and newborns? 14 years of implementation of "Obstetric Risk Insurance"

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In order to provide access to quality obstetric and neonatal care in this vast, sparsely populated West African country, with, high levels of maternal mortality (626 deaths per 100,000 live births) and newborn mortality (39 deaths per 1000 live births), an innovative insurance scheme was implemented by the Ministry of Health in 2002.

This "Obstetric Risk Insurance" (ORI), which is based on a mutual risk sharing scheme, covers all pregnancy and childbirth related costs. For a flat-rate contribution of $21, women receive all essential and emergency MNH services. Women who choose not to subscribe pay for treatment separately and ultimately spend twice as much, or up to ten times more for a caesarean section. The ORI seeks to serve as a transparent and self-financed system. In addition to improving financial access to health care, proceeds from the scheme pay for essential medicines and provide incentives to health workers.

Since the inauguration of the ORI scheme, levels of skilled birth attendance (SBA) in rural areas have increased from 33 per cent to 49 per cent. In intervention zones SBA has increased from 53 per cent to 75 per cent. Likewise the average number of ANC visits per pregnancy has doubled from 1 to 2. However, the MMR has only modestly declined by 60 deaths per 100,000 live births between the last two nationwide surveys (MICS 2007 & 2011).

After 14 years of implementation, 47 per cent of districts are covered by the ORI, representing 56 per cent of the total population. By 2013, 44,000 women had subscribed to the ORI and demand is growing rapidly. The country is at a crossroads of reinforcing quality of care and newborn health within the existing ORI and its extension to harder to reach populations.

The ORI has given financial access to emergency and essential MNH services to an ever larger population but data shows quality of care must improve.

Acknowledgement: Mohamed El Kory Boutou, Jennifer Barak, Sidi Ould Zahaf, Mahfoudh Boye

PHILIPPINES

Early essential newborn care practices among hospital-born babies in Vietnam reduce admissions to the newborn care unit

Immediate care around the time of birth can save newborn lives. This study explored changes in neonatal outcomes after introduction of early essential newborn care (EENC) measures in a tertiary hospital in Vietnam. Da Nang Hospital for Women and Children is a referral hospital for the Central region of Vietnam with 14,000 to 15,000 births every year. Prior to July 2014, babies were separated from mothers after 20 minutes following a normal delivery and after 6 hours following a caesarean section. Since November 2014 more than 90 per cent of babies have received skin-to-skin contact with their mother after birth, until at least the time of the first breastfeed.

In order to explore neonatal outcome changes after introduction of EENC, data were compared before EENC implementation (January – October 2014) and after (November 2014 – September 2015). Data related to neonatal mortality and morbidity, recorded in the hospital for the purpose of audit, were used for this comparison. To assess levels of breastfeeding in the postpartum ward, 200 mothers were randomly surveyed in August 2014 and September 2015.

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EENC practices including immediate drying, skin-to-skin contact, delayed cord clamping and early initiation of breastfeeding reduced asphyxia, hypothermia and infections among newborns in this hospital. Further, implementation of EENC practices resulted in more than a 15 per cent reduction in newborn mortality rate, antibiotic use and admission to NICU. At the same time, levels of exclusive breastfeeding more than doubled.

This study found EENC to be a simple and effective intervention, whichshould be scaled up in resource-limited settings to improve neonatal outcomes.

Acknowledgements: Dr Tran Thi Hoang, Dr. Nguyen Huy Du, MD MPH, Dr. Tran Dinh Vinh, MD PhD, Dr. Nguyen Thu Phuong, MD MMed, Dr. Howard Sobel, MCH Team Leader, WHO WPRO, Manila

TOGO

Increasing access to quality EmONC services through 'Muskoka interagency partnership' in Togo*

Background

The G8's 2010 Muskoka Initiative on Maternal, Newborn and Child Health (MNCH) succeeded in mobilizing funding ($7.3 billion) and advancing the MNCH momentum at high level. However, how is this commitment translated in the countries, such as Togo, who suffer the most from high maternal and neonatal mortality? One year after the Muskoka summit, Togo benefited from financial support ($8.4 million) from France through an interagency programme that united four UN agencies (UNICEF, UNFPA, WHO and UN Women) around the Ministry of Health.

Methodology

The 'Muskoka interagency partnership' supported in 2012, a national Emergency Obstetric and Newborn Care (EmONC) needs assessment, which was done in 864 health centres and revealed a national availability of 53%. Only 24% of EmONC needs were covered and out of seven basic medical interventions, the weakest were instrumental delivery, neonatal resuscitation and removal of retained products. Following this assessment, the Togolese Ministry of Health elaborated in 2013 a new EmONC mapping nominating 97 EmONC facilities. The four agencies of the 'Muskoka interagency partnership' responded by joining forces in supporting 50 EmONC facilities through advocacy for increased number of midwives, building capacities of staff on maternal and newborn health, procuring equipment and medical products, reinforcing supervision skills as well as capacities to undergo maternal and neonatal audits.

Results

In less than a year, the number of functional EmONC facilities increased from 9% (9/97) to 24% (23/97); 68 midwives were deployed out of the 155 needed for the EmONC (44%); neonatal resuscitation is now offered in all 97 EmONC facilities; and 162 maternal and neonatal deaths were notified followed by 47 investigations (29%).

Conclusion

This shows that Muskoka MNCH commitments did provide the means for achieving results in terms of health system strengthening in Togo while enforcing interagency partnership among UN agencies.

Acknowledgement: Magali Romedenne[1], Komi Abalo[2], Yawo Agbigbi[3], Minzah Pekele[4], Michel Brun[5]

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* On behalf of the 'Muskoka Frence Fund'

1 UNICEF, Togo
2 UNICEF, Togo
3 UNFPA, Togo
4 WHO, Togo
5 UNFPA, New York

TOGO

Reducing neonatal mortality in Togo through neonatal resuscitation and kangaroo mother care

Background

The practice of receiving the newborn, including neonatal resuscitation, is an essential component of midwifery but was not properly implemented in Togo. The 2012 national EmONC needs assessment highlighted the neonatal resuscitation as one of the weakest essential interventions, with an estimated intrapartum-related neonatal deaths rate of 82.8‰. 85% of health facilities didn't perform neonatal resuscitation (N=864), mostly due to lack of basic equipment (79%) and lack of regular hands-on practice (74%), even though 82% of staff have basic general knowledge. In addition, only 11.8% of the health centres provided care for prematurely [...] born babies or low birth weight babies, and only 4.9% of health providers have adequate knowledge on essential care for low-weight babies.

The capacities of midwives and delivery attendants were reinforced to establish appropriate methods of newborn care through improving: (1) neonatal resuscitation using the 'Helping Baby Breath' (HBB) education program and (2) the practice of Kangaroo Mother Care (KMC). All health centres that perform more than 30 deliveries per month (179) were targeted and 390 midwives and birth attendants were trained and equipped since 2012. (3) A third component 'Helping Mothers Survive' (HMS) has been recently added in the training package with already 100 midwives having benefited for the comprehensive package in 2016.

While the situation is not yet responding to all quality services criteria, preliminary results suggest an increase of staff knowledge and practices, including immediate newborn assessment and stimulation and basic newborn resuscitation. However, while KMC is common practice in major urban hospitals, it is not yet implemented in peripheral facilities.

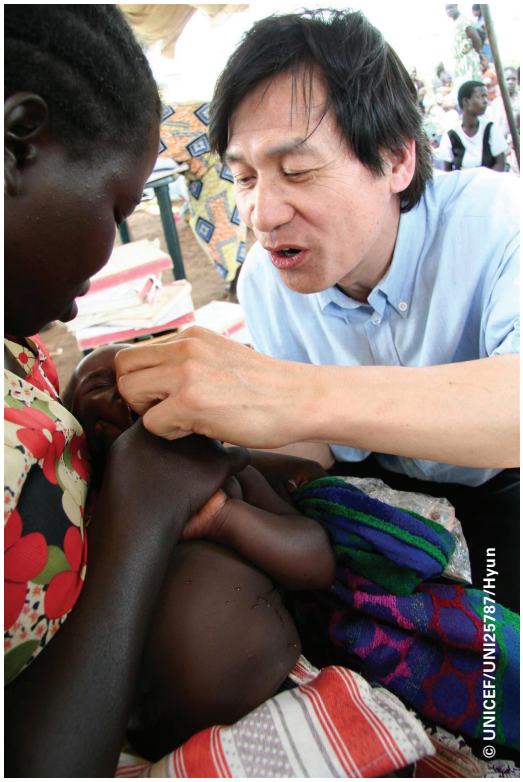
The HBB education program has the advantage to provide a hands-on training that – is based on a step-by-step approach to neonatal resuscitation and which encourages clinical management of neonates. Similarly, midwives should benefit from hands-on training at hospitals offering KMC services to encourage health personnel to adopt the concept.

Acknowledgement: Magali Romedenne, Yaovi Toke, Komi Abalo, Akouete Afanou, Teresa De La Torre
On behalf of the 'French Muskoka Fund'

UGANDA

Improving maternal and newborn health through innovations in hard-to-reach areas of the Karamoja Region, Uganda

Uganda's Karamoja Region has the highest level of maternal mortality in the country, with 700 deaths per 100,000 live births. In 2012, only 18 per cent of women in the region reported having had access to skilled attendance at birth (SBA). Key barriers include poor access to care in remote areas and strong cultural traditions favouring delivering at home in kneeling and squatting positions. UNICEF has partnered with government to implement innovative technologies to increase facility deliveries. Two key innovations include the Birth Cushion, which aims to promote culturally acceptable supports an adaptation of culturally acceptable delivery position practices, and Solar Suitcases, renewable power sources that enable facilities to provide delivery care at night.



In September 2013, UNICEF and the Karamoja government began a study to test the acceptability and use of these innovations in 54 health centers. 100 Birth Cushions were deployed to accommodate women's preference for delivery in a modified squatting position, and each woman in labour was given a choice about her delivery position. Solar Suitcases were also deployed in 50 facilities to provide lighting.

Between 2013 and 2014, skilled birth attendance increased from 21 per cent to 31 per cent. By March 2015, over 10 per cent of women delivered on the Birth Cushions by choice, and in 3 facilities all women chose to use them, during a total of 149 deliveries. In addition, Solar Suitcases enabled 6540 night deliveries, an increaseof 9 per cent, (986 of 11,425) to 46 per cent, 5554 of 12,452 to 46 per cent in March 2015.

Innovative, culturally appropriate and practical technologies can increase utilization of health facilities for safe deliveries. Lessons learned from this study will inform future scale up of these innovations and improve the quality of maternal and newborn outcomes.

Acknowledgement: Neelam Bhardwaj, Clementina Ilukol, Grace Latigi, Kim Dickson, Janet Kayita, Alyssa Sharkey.

UGANDA

Saving mothers and their newborns by timely referrals using a voucher scheme, mitigating first and second delay in maternal death in Karamoja (UNICEF Uganda)

Karamoja is the region with highest maternal mortality in the country with 700 deaths per 100,000 live births. Most women in the region deliver at home with relatives and traditional birth attendance. 49.1 per cent of the population in Karamoja is living at least 5 kilometres from the nearest health center, making it difficult for mothers to attend a facility during labour. The level of skilled attendance at birth was only 21 per cent in 2013.

Only 10 per cent of women were referred to a health facility in 2012 (baseline), and no data was available on referrals due to complications. First and second delay in maternal death is contributing to high maternal and newborn mortality.

In March 2014, UNICEF initiated a voucher scheme in 98 out of 112 health facilities, supporting payment for transportation of the pregnant women in the event of birth complications. Motorcycle drivers and communities were trained and sensitized on the importance of referrals.

Referrals increased to 18 per cent (2,705 referrals for 14,431 births) and 57 per cent (8,226 of 14,434) in 2013 and 2014 respectively. During the past year 19,701 deliveries were recorded, of which 14,434 were referred through the voucher scheme. 1333 women treated for complications including obstructed labour in 121 cases (17 per cent), PPH in 24 cases (3 per cent), APH in 20 cases (3 per cent), multiple pregnancy in 30 cases (4 per cent), breach birth in 37 cases (5 per cent), cord prolapse in 31 cases (4 per cent), previous scare (LSCS) in 57 cases (8 per cent), Mal presentation in 35 cases(5 per cent), and severe anemia in 23 cases (3 per cent). 284 caesarean sections were performed and one maternal death occurred. Of 144 neonates referred, 139 survived with five deaths. 603 mothers and 562 babies' survived complications.

The voucher scheme for referrals is saving the lives of women and their newborns during obstetric complication in hard to reach areas, and will be scaled up in 10 districts with high maternal mortality in 2016.

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VIETNAM

Early essential newborn care practices among hospital-born babies in Vietnam reduces admissions to the newborn care unit

Immediate care practices around the time of childbirth can save newborn lives. This study explored changes in neonatal outcomes after implementation of an early essential newborn care (EENC) intervention in a tertiary hospital in Vietnam. Da Nang Hospital for Women and Children is a referral hospital for the Central region of Vietnam with 14,000 to 15,000 births every year. Before July 2014, babies after birth were separated from mothers at least 20 minutes after normal delivery and more than 6 hours after C-section. Since November 2014 more than 90 per cent of babies received skin to skin contact with their mother after birth until at least the first breastfeed.

In order to explore neonatal outcome changes after EENC, data were compared before EENC implementation (January – October 2014) and after (November 2014 – September 2015). Data related to neonatal mortality and morbidity which were prospectively recorded in the hospital for the purpose of audit were used for this comparison. To assess breast feeding in the postpartum ward, 200 mothers were randomly surveyed in August 2014 and September 2015.


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EENC practices of immediate drying, skin to skin contact, delayed cord clamping and early initiation of breast feeding reduced asphyxia, hypothermia and infections among newborns in this hospital. Further, implementation of EENC practices resulted in more than a 15 per cent reduction in the NMR, antibiotic use and admission to NICU while exclusive breast feeding rate increased more than twice.

In this study, EENC has found to be a simple and effective intervention. This should be scaled up in resource-limited settings to improve neonatal outcomes.

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ZAMBIA

Access to and utilisation of maternal and neonatal health services in the lowest quintile districts of Zambia

Despite significant declines since 1990, levels of maternal and infant mortality in Zambia remain among the highest in Africa. Equity-focused maternal and neonatal health services are essential for improving pregnancy and childbirth outcomes. In 2012 the University of Zambia, with support from UNICEF, conducted a baseline assessment in four of the poorest quintile districts (Chienge, Luwingu, Mungwi, Samfya) in Zambia to estimate coverage of high impact maternal and neonatal health interventions and identify factors associated with access to and use among this predominantly rural poor population.

A mixed methods design was used. A household survey using a standard Lot Quality Assurance Sampling (LQAS) methodology was conducted in each district among mothers of children 0-5 months of age. Districts were divided into contiguous sub-district areas called supervision areas. Supervision areas were classified using standard LQAS decision tables and weighted proportions were estimated at district level by aggregating data across supervision areas. Thematic analysis based on key informant interviews with health staff and focus group discussions with mothers and community volunteers was also conducted.

The LQAS sample included 551 respondents. Coverage of key MNH interventions was low in this poor rural population compared to national averages. The percentage of women who received at least four ANC visits by skilled health personnel was 33 per cent and skilled birth attendance (SBA) was 44 per cent. The proportion of mothers who received SBA and postnatal care within 48 hours was 30 per cent and only 9 per cent for newborns. Significant variation in performance was found between and within districts. Long distances to services, stockouts of commodities, and myths/beliefs emerged as barriers to access and use.

Coverage of MNH services among the poorest populations of Zambia was low. Equity-focused strategies are needed. Use of LQAS as a rapid methodology was useful for quickly providing equity-focused results for planning, action, and accountability.

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WESTERN AND CENTRAL AFRICAN COUNTRIES

Access to water and sanitation in obstetric facilities in 14 Western and Central African Countries: review of Emergency Obstetric and Newborn Care needs assessments


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We used data from National Emergency Obstetric and Newborn Care needs assessments from 14 Western and Central African countries, carried out since 2010. Available WASH information was collected, organized and analysed. We compiled information representing 8,207 maternities with 2,102,740 deliveries.

On average, 82% (range: 54%–100%) of maternities had water available. The sources of available water in these maternities were broken down as follow: 50% running water (range: 11%–88%); 34% borehole (range: 11%–78%); 6% handpump (range: 3%–84%); 1% protected / modern well (range: 3%–6%); 9% unprotected sources (range: 3%–33%). Sub-analysis from 7 countries (4,087 maternities with 1,265,980 deliveries) showed that water was not available on average in 35% of delivery rooms (range: 42%–78%) and in 82% of post-partum rooms (range: 7%–64%). Furthermore, data from six countries (3,223 maternities with 1,132,881 deliveries) indicated that, water was not available in 35% of operating theatres (range: 31%–100%). Information on sanitation was very limited with only three countries reporting.

This is an ongoing work based on the latest available data. The results are alarming with regard to infection prevention and control. They reveal the need for better addressing this essential component of quality maternal and newborn care. Furthermore, there is no evidence that the available water meets WHO minimum standards of Water Sanitation and Hygiene in health care facilities. However we acknowledge that some improvement may have occurred since the data was published.

WASH services are critical to reduce sepsis among mothers and newborns around birth in health facilities. Facility utilization as well as retention of mothers and newborns following birth require water supply and sanitation that meet standards. In spite of that, very little data is available for maternities in Western and Central Africa.

Acknowledgement: Fabrice Fotso (WASH in Health Specialist – UNICEF WCARO); Alain Prual (Senior Health Specialist MNH – UNICEF WCARO)

MUSKOKA INTER-AGENCY PARTNERSHIP

Added value of working together: experience of the French-funded "Muskoka Inter-Agency Partnership for Mothers and Children" in Eight Western and Central African Countries

The four UN agencies which work on women's and children's health (WHO, UNICEF, UNFPA and UN Women) were awarded a grant of €100 million by the French government, to be spent over a five year period (2012-2016) to accelerate the attainment of MDGs 4 & 5 in 11 French-speaking Western and Central African countries as well as Haiti. One condition attached to this funding was that all projects implemented should use the same logical framework, indicators, results framework, action plan and intervention together as One.

Each year, the four agencies report, together with the national governments, on their achievements and progress achieved, benchmarking against internationally recognized MNH indicators. A simple results framework links expenditures (inputs) to interventions (process) and to coverage and use of services (outcomes). Data from HMIS and most recent surveys are used to inform the results framework. The impact indicators are those to be reported at the 2015 MDG Conference.

This panel will provide examples of concrete achievements in different countries following the health system pillars approach.

Working as One has shown to be a challenge as each agency has its own timing for planning and budgeting and its own system of accountability and reporting, not to mention the challenges associated with aligning with national planning processes. Another main challenge is the impossibility of attributing results outputs and outcomes to a single source of funding. Donor accountability is thus complicated, particularly when reporting to political decision makers rather than public health technicians. The results framework developed by the four agencies aim for medium-term integration of all sources of funding, to achieve shared goals. This partnership has raised awareness around the urgent need to make 'working as one' a more concrete reality.

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EAST ASIA AND PACIFIC COUNTRIES

Opportunities and challenges for equitable maternal, neonatal and child health in East Asia and Pacific countries

Overall coverage improvements in maternal, neonatal and child health (MNCH) may not necessarily improve equity in coverage and survival outcomes. Many countries in the East Asia and Pacific (EAP) region have undertaken some level of equity analysis. This study was conducted to document country experiences and identify opportunities and challenges encountered in seeking to implement equity-driven strategies.

We reviewed published literature and programme documents from 22 EAP countries to examine methods undertaken for MNCH equity analyses and strategy formulation. We also conducted semi-structured interviews in Mongolia, Papua New Guinea and Vietnam with MNCH policy makers, managers and implementers to understand current equity-focused MNCH strategies and factors affecting the efficiency and performance of these strategies.

Most EAP countries used data from population-based surveys (e.g. MICS and DHS) for their child deprivation and equity analyses. However, these surveys under-represent or exclude some populations (e.g., ethnic minorities, refugees, orphans, disabled children, street children and urban slum-dwellers). Additional literature, documents and interviews filled some information gaps. Key strategies to achieve equitable coverage in the region include universal access, focused targeting and financial and social protection schemes. Challenges remain to implement these strategies at scale. These include poor stakeholder awareness of equity problems, limited capacity to implement national level policies and plans, fragmentation of government departments and lack of accountability, decentralization without empowerment, inadequate inter-sectoral convergence, low participation of civil society organizations, ineffective referral systems, insufficient workforce in underserved areas, poor quality of care and low capacity of implementing agencies to monitor results for equity.

Exchange of best practices and technical assistance will help countries evolve, monitor and sustain equitable policies and programmes. Delivery and monitoring of MNCH services to disadvantaged populations should be a key focus of any equity-focused health system. In addition, future surveys should ensure adequate inclusion of disadvantaged groups.

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