Final Report

To Review Newborn Training Materials in use in Pakistan

unicef

CON TENTS

ANNEXES

ACRONYMS

AAP	American Academy of Pediatrics
AJK	Azad Jammu & Kashmir
AKU	Agha Khan University
BEmONC	Basic Emergency Obstetric Care
CDA	Capital Development Authority
CEmONC	Comprehensive Emergency Obstetric Care
CMW	Community Midwife
ECEB	Essential Care for Every Baby
ECSB	Essential Care for Small Babies
ENAP	Every Newborn Action Plan
ENC	Essential Newborn Care
EPI	Expanded Programme on Immunization
FATA	Federally Administered Tribal Areas
HBB	Helping Babies Breathe
HBS	Helping Babies Survive
HSRU	Health Services Uniform Unit
ICT	Islamabad Capital Territory
IMR	Infant Mortality Rate
IMNCI	Integrated Management of Newborn Care
JSI	John Snow, Inc
KMC	Kangaroo Mother Care
LBW	Low-birth Weight
LHW	Lady Health Workers
MCHIP	Maternal & Child Health Integrated Program
MDG	Millennium Development Goals
MoH	Ministry of Health
MoNHSR&C	Ministry of National Health Services, Regulation and Coordination
MNCH	Maternal Newborn and Child Health
MNH	Maternal and Newborn Health
NMR	Neonatal Mortality Rate
PNC	Pakistan Nursing Council
RMNCAH	Reproductive Maternal Newborn Child and Adolescent Health Package
SCF	Save the Children
S&T GDA	Survive and Thrive Global Development Alliance
UN	United Nations
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

The United Nations International Children's Emergency Fund (UNICEF), the World Health Organization (WHO) and other UN organizations joined with public, private and civil society partners in a global movement of '*A Promise Renewed',* to accelerate reduction in preventable maternal, newborn and child deaths. A lot of progress has been made in the infant and child mortality in Pakistan and under-5 mortality from 141 in 1990 to 89 in 2012. However, despite a series of interventions and initiative in this regard, the neonatal mortality is still at 55 deaths per 1000 live births[1] for more than past two decades.

In Pakistan, newborn health has been included as an important component of the Reproductive Maternal Newborn Child and Adolescent Health Package (RMNCAH). The National Vision Action Plan was developed on directions of the Prime Minister with ten priority areas and was launched on 13th May 2015 with UNICEF support. The Global Every new-born action plan has nine critical newborn care essential interventions that should be focused upon for new-born survival.

In April 2015, an Asia Regional HBS five days workshop was organized at Bangladesh to develop the first regional pool of master trainers and champions in the Helping Babies Survive curricula. A five member team participated from Pakistan including representatives of Ministry of National Health Services Regulation & Coordination Islamabad, Department of Health Punjab, UNICEF, Save the Children and USAID funded MCHIP - Sindh Project. The team developed a draft country action plan as part of the five days Training of Trainers in Bangladesh. The objective was to introduce HBS training package in the country.

In this regard, a comprehensive purposely driven desk review of the existing Newborn Care training packages which are currently used at National/Provincial/Areas level in Pakistan for trainings of various cadres at facility and community based was conducted. The desk review revealed that critical interventions for the newborn care are well reflected with general and specific information in facility and community based curricula. However, the information regarding treatment of severe infections and in-patient care for sick and small/LBW babies (Focus on IV fluids, feeding support and safe oxygen administration) are not specifically present.

[1] *Pakistan Demographic Health Survey 2012-2013*

The Essential Newborn Care, Reference Manual Punjab, Pakistan and The Newborn Care, Resource Manual SCF can be used to develop training modules as required. However, both lack the pre-pregnancy health care which is a part of continuum of care for newborn health care package. The draft of Newborn Strategy, Sindh has comprehensively encompassed the entire continuum of care for newborn care package.

The characteristic of the HBS training package is the use of low-cost, purpose-driven innovations that are integrated in the educational and quality improvement of newborn care. The resuscitation become integrated within a broader package of newborn care including early and exclusive breastfeeding, thermal protection, clean cord care, and early identification and management of infections and low birth weight babies. The HBS training package can be adapted and integrated into the existing newborn training materials. However, it cannot be introduced as a standalone intervention. HBS can be introduced by conducting two-day training program through a training module or may be introduced within a complete integrated training that spans the MNCH continuum.

Desk review process was followed by conducting a stakeholder mapping, key informant interviews, focus group discussion to gather information regarding the list of community and facility based newborn health curricula being used. This was followed by a series of five consultative meetings, one each at provincial level and one for the federating areas with the relevant stakeholders. The entire process was concluded by conducting a national consultative meeting in which the desk review findings, nine critical interventions of newborn care, conclusions, recommendations, opportunities and the way forward for replication and /or scaling up of the effective essential newborn care training package at the country level were finalized. UNICEF Pakistan provided support for completion of this task.

The recommendations from the national consultative meeting are as follows:

1. There is a need to increase the allocation for health sector from 0.6% to 4% of GDP.
2. A Technical Working Group may be constituted to review/ oversee the entire process of standardization and incorporation of selected modules.
3. Develop one training manual to address all the nine critical interventions being adopted at international and regional levels including the nutritional component, catering all level of health care delivery. (Separate module for each level).
4. The standardized integrated newborn care training package needs to be adapted and translated in cultural specific contexts for provinces and areas.

5. The Helping Babies Survive training package can be adapted and integrated into the existing newborn training materials. It can be introduced as a pilot initiative and assessed for way forward.
6. System approach must be adopted for accountability and M&E mechanisms.
7. The critical interventions essential for newborn survival need to be implemented by training health care providers on a uniform standardized training format and a training database should be maintained.
8. Provision of enabling environment for practicing the skills acquired through training packages at different levels of application.
9. A pool of master trainers and health providers must be identified and database be maintained at the national/provincial/areas level for roll out of the HBS training package.
10. To develop strategies to facilitate use of inpatient neonatal care services for sick and small/LBW newborns living in rural and remote areas.
11. Latest agenda and related information may be shared with districts. This will facilitate districts in implementation of new guidelines/standards, etc.
12. Linkages need to be developed with academia, Pediatric associations, etc for technical guidance and inputs.
13. Quality improvement mechanisms should be ensured by having standardized tools such as guidelines and check lists for quality of various trainings, implementation and service delivery.
14. Research, database, data analysis, record keeping and evaluation are the prerequisites to enhance newborn care across the board should be encouraged.
15. Specific indicators must be developed and incorporated in existing MIS/DHIS to measure various interventions.

CHAPTER 1 - BACKGROUND

The United Nations Children's Fund (UNICEF), the World Health Organization (WHO) and other UN organizations joined with public, private and civil society partners in a global movement to accelerate reduction in preventable maternal, newborn and child deaths. Under the banner of '*A Promise Renewed',* the partners have pledged to redouble efforts to end preventable maternal, newborn and child deaths.

The global neonatal mortality rate declined 40 percent from 33 deaths per 1,000 live births in 1990 to 20 in 2013. Despite falling rates and levels of neonatal mortality, the proportion of under-five deaths that occur within the first month of life (the neonatal period) has increased from 37 percent in 1990 to 44 percent in 2013, because declines in the neonatal mortality rate are slower than those in the mortality rate for older children[2].Most newborn deaths occur in low- and middle-income countries.

Major Causes of Neonatal Mortality

Cause of death	Percentage
Birth asphyxia/trauma	40
Prematurity	17
Pneumonia	6
Congenital anomalies	3
Neonatal sepsis	20
Neonatal tetanus	1
Diarrhea	1
Meningitis	1
Other	2
Unexplained death	9
Total	100

Pakistan is the sixth most populous country (185 million) of the world and 64% of its population lives in rural areas. Pakistan has reduced its under-5 mortality from 141 in 1990 to 89 in 2012, which is much slower than the MDG4 goal of reducing it to 46 by 2015[3]. In the past five years the neonatal mortality rate is 55 deaths per 1000 live births[4].

In Pakistan, newborn health has been included as an important component of the Reproductive Maternal Newborn Child and Adolescent Health Package (RMNCAH). There are several approaches to reducing newborn deaths that have proven to be both feasible and cost-effective including tetanus toxoid immunization, skilled heath care delivery, immediate and exclusive breastfeeding. Therefore, improving newborn health is not a matter of developing new solutions to the old problems; but rather a matter of applying, replicating and scaling up the proven solutions via existing mechanisms. The international best practices are also being replicated in Pakistan to achieve better results. The real challenge is to spread up

[2] *Trends in Child Mortality 2014-UNICEF*
[3] *Projected Population Estimates Pakistan Bureau of Statistics, 2014*
[4] *Pakistan Demographic Health Survey 2012-2013*

the awareness of sound newborn health practices or "what works" to those who need it, especially mothers, other primary caregivers, and health providers, and to integrate essential newborn health care into existing maternal and infant care programs.

Packages of proven interventions ensure the provision of basic and additional care for women and newborns to prevent or treat the main causes of mortality. Providing extra care to small (either small for gestational age and/or preterm) and sick babies is particularly important in reducing neonatal mortality. Health personnel need to be sufficiently competent and equipped to support women and these babies, many of whom do not need advanced or intensive care and can be managed in a primary health care level or possibly in the community. Inpatient care facilities can play a vital role for babies who need full supportive facility care.

The National Vision Action Plan developed on directions of the Prime Minister with ten priority areas, is a dynamic document, leading to a mechanism for national consensus on important issues around RMNCAH and Nutrition in the times to come, and is in line with global commitments for reproductive, maternal, newborn, child, and adolescent health. All provinces, regions, partners, line ministries, academics and international experts have contributed and endorsed it in order to take the process forward. The National vision was launched on 13th May 2015 with UNICEF support.

The Global Every new-born action plan has nine critical newborn care essential interventions that should be focused upon for new-born survival. To support the aims of ENAP, the United States Agency for International Development's (USAID) flagship Maternal and Child Survival Program and its partners, the Bangladesh Ministry of Health and Family Welfare, UNICEF, the American Academy of Pediatrics (AAP), Survive & Thrive Global Development Alliance, Laerdal Global Health Foundation and USAID's Applying Science to Strengthen & Improve Systems Project. In this regard, a series of competency based newborn and maternal health (MNH) training modules, "Helping Babies Survive" (HBS) have been developed by the American Academy of Pediatrics (AAP) in collaboration with other partners under the auspices of the Survive and Thrive Global Development Alliance (S&T GDA). The HBS series consists of three newborn care training modules, including the well-tested and scaled-up curriculum on neonatal resuscitation, Helping Babies Breathe (HBB). The most two recent modules within the series of learning materials are 'Essential Care for Every Baby' (ECEB) and the 'Essential Care for Small Babies' (ECSB). These modules have been developed in response to countries expressed needs for user-friendly training modules to teach newborn

care and can be adapted according to the cultural specific context or can be introduced as a new package/module.

In April 2015, an Asia Regional HBS five days workshop was organized at Bangladesh to initiate a dialogue with selected Asian countries implementing MNH programmes and to develop the first regional pool of master trainers and champions in the HBS curricula. A five member team participated from Pakistan including representatives of Ministry of National Health Services Regulation & Coordination Islamabad, Department of Health Punjab, UNICEF, Save the Children and USAID funded MCHIP - Sindh Project. The team developed a country action plan as part of the five days Training of Trainers in Bangladesh. The objective was to introduce HBS training package in the country. On their return, a consultative process involving the key stakeholders recommended that in spite of introducing yet another training package, the existing training packages need to be reviewed and effort should be made to align the existing materials with HBS and avoid another parallel initiative.

In this regard, it was jointly agreed by Mo/NHSR&C, UNICEF, WHO, Save the Children and USAID that a consultant will be hired with the support of UNICEF to conduct the desk review of all the facility and community based ENC curricula which are currently being used in the country. The Consultant will conduct key informant interviews with the national MNCH stakeholders and will also convene provincial and federating areas consultations to seek recommendations regarding the nine critical newborn interventions in accordance to ENAP. This will be followed by a national consultative meeting in which Consultant will present the desk review findings, nine critical interventions of newborn care and the way forward to adapt Helping Babies Survive training package. During the national consultative meeting, conclusions, recommendations, opportunities and the way forward for replication and /or scaling up of the effective essential newborn care training package at the country level will be finalized. UNICEF Pakistan provided support for completion of this task.

CHAPTER 2 - METHODOLOGY

A comprehensive purposely driven desk review (attached as annex 1) of the existing Newborn Care training packages which are being used at National/Provincial/Areas level in Pakistan for trainings of various cadres at facility and community based was conducted. In order to broaden the scope of desk review, other newborn training related documents and reports of UNICEF, WHO, MOH, EPI program, provincial and national reports from donors and multilateral agencies, other published papers and provincial government reports were also included in the review process.

To commence the desk review process, an inception meeting (minutes attached as annex 2) was conducted at the national level with Mo/NHSR&C, UNICEF, WHO, UNFPA, USAID and Save the Children. It was followed by conducting a stakeholder mapping (attached as annex 3), to determine key list of provincial MNCH stakeholders and prioritize them on the basis that who has developed/adapted what, where, when and for whom related to Newborn Care training packages in Pakistan. Moreover, 12 key informant interviews (7 at national level, 4 in Punjab province and 1 at FATA Health Secretariat) and focus group discussion (attached as annex 4) were also conducted with Ministry of National Health Services Regulation and Coordination, WHO, UNICEF, USAID, JSI and Save the Children to gather information regarding the list of community and facility based newborn health curricula being used.

This was followed by a series of five consultative meetings (minutes attached as annex 5), one each at provincial level and one for the federating areas. The participants comprised of MNCH Program, NP for FP&PHC, Neonatologists, Gynecologists, USAID, WHO, UNICEF, SCF, USAID funded MCHIP – Sindh project and other relevant stakeholders. The design and methodology of consultative meetings was jointly developed after a systematic review of background documents, gathering of existing community and facility based newborn health care curricula as reference documents and conducting individual planning and consultative meetings with Dr. Sabeen Afzal, Deputy Director Programs, Ministry of National Health Services & Regulations and Dr. Samia Rizwan Health Specialist, UNICEF country office. Based on these meetings, individual session plans, group work methodology and power point presentation was developed. All the consultative meetings were designed to encourage open discussions, active participation and group recommendations. Keeping in view, the diverse expertise and experiences brought in by the participants several techniques were incorporated which included, group work, presentations, discussions, experience sharing and reflection, open and closed ended questions.

The entire process was concluded by conducting a national consultative meeting (minutes attached as annex 6) in which the desk review findings, nine critical interventions of newborn care, conclusions, recommendations, opportunities and the way forward for replication and /or scaling up of the effective essential newborn care training package at the country level were finalized. UNICEF Pakistan provided support for completion of this task.

CHAPTER 3 - PROVINCIAL & FEDERATING AREAS CONSULTATIONS

The detailed report of provincial and federating areas consultative meetings are attached as annex 5.

3.1: OBJECTIVES

1. To gather information regarding the list of community and facility based newborn health curricula being used at provincial and federating area level.
2. To share the list of community and facility based newborn health curricula and nine key thematic areas identified during the desk review of all newborn health related training materials being used in Pakistan.
3. To gather information regarding newborn health training database supported by partners.
4. To introduce Helping Babies Survive Package.

3.2: OUTCOME OF THE CONSULTATIVE MEETINGS

The participants of provincial and federating areas consultative meetings are aware of:

1. Nine key thematic areas identified during the desk review of all newborn health related training materials being used in Pakistan.
2. Best practices and lesson learnt shared regarding the nine key thematic areas of newborn health care.
3. Understand the preliminary information regarding Helping Babies Survive Package.
4. Participants recommend the way forward.

3.3: KEY RECOMMENDATIONS & WAY FORWARD

3.3.1: AJK, FATA & GB

Group 1: Advocacy & policy support

1. Develop and implement newborn survival strategies to ensure focus on newborn programming with appropriate budget allocations.
2. Advocacy is required with CPSP, PNC, PMDC, etc; for standardization of pre-service and in-service training curricula.
3. Engagement of relevant departments and DHMTs to create enabling environment for the availability of essential commodities required for newborn health care.
4. Pre-service training curricula for all cadres need to be revised and updated to include newborn health care.

5. Refresher course manual on newborn health care must be made available for all cadres especially, the community based front line health workers.
6. Training database to be maintained at various levels.
7. Inclusion of key newborn health care indicators in main district health information systems, such as birth asphyxia, neonatal sepsis, preterm, stillbirths, etc
8. Supervisory and monitoring system needs to be established for a regular follow-up of the training participants while practicing their skills at their respective facilities.
9. The supervisory observation may be recorded according to the pre-defined structured checklists.
10. An accountability system must be placed for the various cadres trained in newborn health care service delivery by conducting neonatal death audits at community and facility levels.
11. Separate module on newborn health care needs to be developed for households, caregiver and mothers.
12. Separate modules must be developed for cost-effectiveness and incorporation of new information at a later stage.

Group 2: Facility based Gynecologists

1. The newborn health care manual must be standardized according to various facility levels.
2. Advocacy for newborn care with policy and decision makers to create enabling environment for newborn health care interventions at the facility level.
3. Capacity building of target group according to pre-defined selection criteria.
4. Involve all relevant cadres of facility based health service providers in newborn health care interventions.
5. Ensure provision and regular supply of all required items, equipments and pre-requisites for newborn health care
6. Robust monitoring while implementation of designed and planned activities.
7. Incorporate obstetric & neonatal care in pre-service training of all medics and paramedics.

Group 3: MNCH and LHW Program.

1. CMWs & LHWs can also provide prenatal corticosteroids if it is included in their scope of work.
2. Practical on-the-job training and refresher courses on use of Partograph must be arranged for deployed CMWs. It should be followed by strict monitoring and supervision with pre-defined competency based checklists.
3. Practical hands-on training and refresher courses on assisted vaginal delivery are required to enhance CMW skills.

4. HBS module can be contextualized in CMW curriculum and training and supplies be provided to CMWs.
5. Community IMNCI training should be included in CMWs curriculum with a special focus on Kangaroo Mother Care, eye care and use of ointment, cord care and use of Chlorhexidine.

Group 4: Neonatologists

1. Standard curriculum is required for sick newborn, small/low birth weight babies.
2. In-service training of health care providers on usage of equipment at sick newborn units for in-patient neonatal care.
3. Capacity building of CMWs in administration of Prenatal Corticosteroids for management of Preterm birth.
4. Capacity building in interpersonal communication and communication Skills
5. Human resource trained in newborn health care management is required at facility level.
6. The facility based newborn training curriculum must include topics of sterilization, incubator care, oxygen management, fluid and electrolytes management, feeding protocols, advanced neonatal life support , neonatal formulary, phototherapy management, exchange transfusion, ventilation, CPAP and kangaroo mother care.
7. Ensure availability of functional equipment to prevent and treat neonate and infant morbidity and mortality.

3.3.2: FEDERALLY ADMINISTERED TRIBAL AREAS

Recommendations:

1. Standard curriculum is required for Sick Newborn, Small/LBW Babies.
2. In-service training of HCPs on usage of equipment at SNUs for in-patient neonatal care.
3. Capacity building of health care providers in interpersonal communication skills.
4. Ensure supportive supervision and competency based on-the-job trainings for health care providers.
5. Technical support must be provided by the donor agencies for FATA MNCH programme.

3.3.3: BALUCHISTAN

Recommendations:

1. Organize Competency based Refresher courses for CMWs in use of Partograph.
2. Capacity building of CMWs in administration of Prenatal Corticosteroids for management of Preterm birth.

3. Ensure that equipment and supplies needed for newborn resuscitation are available at community level.
4. HBS package must be integrated in the newborn care curriculum.
5. Ownership of the Government for effective practice and implementation of kangaroo mother care.
6. Capacity building of health service providers to equip them with the relevant skills required in practicing and monitoring the implementation of KMC.
7. Infection prevention training, refresher courses and essential equipments are required to equip the facility and community based health care providers with the relevant skills required.
8. Supportive supervision and monitoring of the trainings is vital for quality assurance.
9. Regular reporting and recording of treatment of severe infections must be ensured.

3.3.4: KHYBER PUKHTUNKHAWA

Recommendations:

1. All the newborn care interventions and HBS need to be integrated in one uniform standardized package.
2. Capacity building of CMWs in administration of Prenatal Corticosteroids for management of Preterm birth.
3. Supportive supervision and monitoring of the trainings is vital for quality assurance.
4. Develop home based care training curricula for LHWs to target mothers, household and caregivers.
5. Capacity building of HCPs in Behaviour Change Communication and Interpersonal Communication skills.
6. Research, data analysis, record keeping and evaluation required for newborn care.
7. Ensure practice of uniform standard operating procedures.

3.3.5: PUNJAB

Recommendations:

1. Essential Newborn Care – Reference Manual, Punjab may be used as a reference for developing modules or ENC training package.
2. Helping Babies Survive training package must be integrated in the existing Newborn training curricula.
3. Ensure functional newborn health care units at health facilities and capacity building of HCP in usage of equipments at Sick Newborn Care Units.

4. Urdu version of newborn care manual is recommended for LHW training.
5. HBS should also be included in LHV, CMW and LHW curriculum.
6. Capacity building of all cadres in Communication skills.
7. Training of the relevant staff in management of emergency resuscitation trolleys.
8. Ensure continued supply of Hemoglobinmeter and Glucometer at the facility level.
9. Strong referral mechanism must be in place to provide newborn health care for critical interventions.
10. The training calendar of all the partners must be regularly shared in order to avoid duplication.
11. Newborn health care messages must be displayed in Urdu languages at all health facilities.
12. An appropriate cultural sensitive word may be used for Kangaroo Mother Care in Pakistan.
13. Ensure quality assurance for various trainings, implementation and service delivery.
14. Ensure monitoring and supportive supervision for quality of training, implementation and service delivery.

3.3.6: SINDH

Recommendations:

1. Newborn Strategy Sindh may be used as a reference for future interventions.
2. All the newborn care interventions and HBS need to be integrated in one uniform standardized package.
3. All training materials must be reviewed, adapted and endorsed by the Technical Review Committee.
4. Close supervision and mentoring to ensure the use of Partograph.
5. Ensure lactation management at the community and facility level.
6. Capacity building of all health care providers in Helping Babies Breathe training package.
7. Capacity building of CMWs in administration of Prenatal Corticosteroids for management of Preterm birth.
8. Capacity building of HCPs in Behaviour Change Communication and Interpersonal Communication skills.
9. Research and evaluation required for newborn care.

CHAPTER 4 - NEWBORN CARE TRAININGS DATABASE

The Newborn health care training database was gathered during the federating areas and provincial consultations. The dtailed analysis is provided in annex 5.

4.1: HELPING BABIES BREATHE TRAININGS (HBB)

Province	Master Trainer Training			Trickle Down Trainings		
	No. of Batches of Master Trainer Trainings	Month/Year Organized	Total No. of Master Trainers Trained	No. of Batches of Trickle down Trainings	Month/Year Organized	Total No. of HCPs Trained
AJK	1	Dec 2014	15	3	Jan - May 2015	45
Baluchistan	1	Sep 2014	16	28	Oct - Jan. 2015	655
FATA	3		56			
GB	1	Sep 2014	16	8	Jan - May 2015	200
Punjab	11 (By end of Dec 2015)	Jan 2013 – Dec 2015	220 (By end of Dec 2015)	100	Aug 2013 - Dec 2015	2480
KPK	3	5th – 6th June 2014 13th – 14th Feb 2105	64	5	Dec 2014 – Mar 2105	96

		24th – 25th April 2015				
Sindh	1	Aug 2014	18	12	Oct 2014 - Feb 2015	304
Total	**7**		**129**	**120**		**3,780**

4.2: ESSENTIAL NEWBORN CARE TRAININGS

PROVINCE	Master Trainers Trainings						Trickle Down Trainings					
	Community Based			Facility Based			Community Based			Facility Based*		
	No. of Batches of Master Trainer Trainings	Month/Year Organized	Total No. of Master Trainers Trained	No. of Batches	Month /year Organized	Total No. of HCPs Trained	No. of Batches	Month /Year Organized	Total No. of HCPs Trained	No. of Batches	Month /year Organized	Total No of HCPs Trained
AJK							1	Jan-May 2015	24	1	Jan-May 2015	17
Balochistan												
FATA	2		30									
GB							4	Jan-May 2015	90	2	Jan-May 2015	25
KPK	1	Nov-14	14				3	2014	70	13	2014 - 2015	298
Punjab	21	Feb – Dec 15	490						900 + 490 = 1,290			
Sindh	1	Dec-14	22				8	Dec - Jan 2014	252			
Total	**23**		**526**				**16**		**1,726**	**16**		**340**

4.3: USE OF CHLORHEXIDINE FOR UMBILICAL CORD CARE TRAININGS

PROVINCE	Master Trainers Trainings						Trickle Down Trainings					
							Community Based			Facility Based*		
	No. of Batches of Master Trainer Trainings	Month/Year Organized	Total No. of Master Trainers Trained	No. of Batches	Month /year Organized	Total No. of HCPs Trained	No. of Batches	Month /Year Organized	Total No. of HCPs Trained	No. of Batches	Month /year Organized	Total No of HCPs Trained
AJK												
Balochistan												
FATA	1 (ToT National level)	August 2015	2									
GB												
KPK	1 (ToT National level)	August 2015	2									
Punjab	1 (ToT National level)	April 2015	28				203	June – July 2015	3,247	25	May – June 2015	768
Sindh			22									
Total			**32**				**203**		**3,247**			**768**

4.4: SICK NEWBORN CARE UNITS STRENGTHENED IN PAKISTAN

Province	Total No. of Sick Newborn Care Units Strengthened	Districts	Future Plans
AJK	3	One hospital each in Districts Muzaffarbad, Poonch & Neelum are in the process of being strengthened	Three SNCUs will be strengthened by capacity building of staff and advocacy with Government for placement of adequate staff
Baluchistan			
FATA	2		Strengthening of two SNCUs in Bajuar and Kurrum agencies
Gilgit Baltistan	5	One hospital each in Districts Astore, Diamer, Ghizer, Gilgit and Skardu are in the process of being strengthened	Five SNCUs will be strengthened by capacity building of staff and advocacy with Government for placement of adequate staff
Khyber Pukhtunkhawa	5	Swat, Malakand , DI Khan , Bannu and Karak	Strengthening of two SNCUs in Dir Upper and Chitral districts
Punjab	8	Four in hospitals of Lahore district and Four in Bahawalnagar, Hafizabad, Mianwali and Bhakkar districts	8 SNCUs will be strengthened including advocacy with Govt. for placement of adequate staff

Sindh	3	SNUS in three Universities. Badin, Nawabshah	Strengthening of three SNCUs in Sukkur, Khairpur and Nowshero Feroze districts

CHAPTER 5 - DESK REVIEW FINDINGS

The detailed report of desk review findings is attached as annex 1.

The desk review finings revealed that presently, there are two types of newborn care training packages being used in Pakistan. One is for facility based health care providers and the second package aim at the capacity building of community level health care providers. All the curricula are developed through a joint consultative process and with collaborative efforts of Health Departments of AJK, Baluchistan, FATA, Gilgit Baltistan, KPK, Punjab and Sindh, Pakistan Nursing Council, Lady Health Worker Program, UNICEF, WHO, USAID, Save the Children, PAIMAN, Mercy Corps, and Technical Resource Facility. Furthermore, there are resource manuals and global initiatives/packages for essential newborn care interventions.

The desk review, national, provincial and federating area consultations identified a list of existing newborn training packages which are in use for the community and facility based trainings in Pakistan. Moreover, Integrated Management of Neonatal and Childhood Illness strategy, The Care of the Newborn – Reference Manual, Save the Children and Essential Newborn Care Reference Manual, Punjab were also included as a part of the desk review. In addition, the global initiative/packages of Helping Babies Breathe and Helping Babies Survive were also considered as integral training packages for the review.

Facility Based Existing Curricula

1. Pregnancy, Child birth, Postpartum, & Newborn Care Curriculum
2. Essential Newborn Care Course

Community Based Existing Curricula

1. CMW Curriculum
2. LHW Curriculum
3. Essential Newborn Care for Community Health Workers (Nauzahida Bachoon Ki Zaroori Dekh Bhal Ka Course)
4. Infant and Young Child Feeding Counseling – An Integrated Course

Resource Manuals

1. The Care of the Newborn – Reference Manual, Save the Children
2. Essential Newborn Care Reference Manual, Punjab

New Addition

1. Role of Chlorhexidine in Prevention of Newborn Sepsis
2. Helping Babies Breathe

New Training Program

1. Helping Babies Survive

The draft of Newborn Strategy, Sindh has comprehensively encompassed the entire continuum of care for newborn care package. The Essential Maternal and Newborn Care Trainer Manual developed by The Khyber Institute of Child Health Peshawar and CMWs Refresher Course for five weeks developed by Mercy Corps, Baluchistan has also elaborated the essential newborn care interventions.

Principles of essential newborn care

Air: Resuscitate and maintain an airway.

Warmth: Keep the newborn warm and avoid unnecessary hypothermia or cold stress.

Food: Encourage early breast feeding, and feed high-risk newborns more frequently.

Hygiene: Maintain hygiene during delivery and cord cutting; treat infections promptly.

Love: Ensure the newborn infant stays close to its mother, and mothers have open access to their newborn infant if he or she requires special care.

5.1: IDENTIFIED CRITICAL INTERVENTIONS

The desk review identified the following critical interventions as the integral component of 'Newborn Care Training Package' in accordance to ENAP.

1. Management of pre-term birth - (focus on prenatal corticosteroids)
2. Skilled care at birth - (focus on the use of partograph)
3. Basic Emergency Obstetric Care - (focus on assisted vaginal delivery)
4. Comprehensive Emergency Obstetric Care - (focus on C-section)
5. Basic Newborn Care - (focus on cord care, warmth, breastfeeding)
6. Neonatal resuscitation
7. Kangaroo mother care – (focus on skin to skin, BF, feeding support for premature and small babies)
8. Treatment of severe infections
9. Inpatient care for Sick and Small/ LBW Babies - (focus on IV fluids/feeding support and safe oxygen)

5.1.1: MANAGEMENT OF PRETERM BIRTH - (FOCUS ON PRENATAL CORTICOSTEROIDS)

Recommendation:

1. Ensure that use of prenatal Corticosteroids in management of preterm birth is integrated into existing newborn care guidelines as a part of Continuum of care.

2. Incorporate updated ACS guidelines into pre-service education for healthcare providers.
3. Provide competency based in-service training on ACS administration for all healthcare providers and CMWs administering ACS and provide necessary supportive supervision to ensure best practice is integrated into care.
4. Standard job descriptions for health workers for all levels of care that reflect their role in prescribing and/or administering antenatal corticosteroids.
5. Ensure functioning supply and delivery systems in place to support a continuous supply of necessary medication and supplies.
6. Increase community awareness of the importance of preterm birth prevention and the signs of threatened preterm birth to encourage early and appropriate referral of women and babies needing preterm birth care.
7. Specify any information on the use of antenatal corticosteroids included in the HMIS.

5.1.2: SKILLED CARE AT BIRTH - (FOCUS ON THE USE OF PARTOGRAPH)

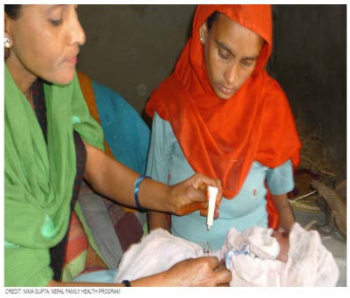
Recommendations:

1. Organize competency based refresher courses on use of Partograph for CMWs and other health care providers.
2. Close supervision and mentoring to ensure the use of Partograph.
3. Ensure deployment of trained and certified CMWs in remote areas for skilled care provision at birth.
4. Identification of challenges faced by skilled birth attendants in use of Partograph.
5. Ensure quality improvement mechanisms (supervision and mentorship programmes, use of checklists, job-aids, periodic service reviews) are in place for skilled delivery services.

5.1.3: BASIC EMERGENCY OBSTETRIC CARE - (FOCUS ON ASSISTED VAGINAL DELIVERY)

Recommendations:

1. Competency-based in-service refresher training courses for facility based health care workers to acquire the necessary knowledge and skills to perform assisted vaginal delivery (vacuum and forceps).
2. Ensure that national standard treatment guidelines or clinical protocols on assisted vaginal delivery are available as a part of the BEmOC package in the health facilities.
3. Ascertain that trained/authorized health service providers are available to perform assisted vaginal delivery using vacuum extractors or forceps at BEmOC facilities.
4. Ensure that equipment and supplies needed for BEmOC are present and functioning.
5. Recording and reporting of number of assisted vaginal delivery performed monthly in BEmOC facility.



5.1.4: COMPREHENSIVE EMERGENCY OBSTETRIC CARE, (FOCUS ON C-SECTION)

Recommendations

1. Guidelines for the specific indications for caesarean section and timely referral must be available in CMWs birthing station.
2. Mapping of the available C-section services for timely referral by community health workers.
3. Conduct data review of the quality of caesarean sections for maternal death audits and perinatal death reviews.
4. Ascertain that trained/authorized health service providers are available to perform caesarean section at CEmOC facilities.
5. Ensure that equipment and supplies needed for CEmOC are present and functioning.

5.1.5: BASIC NEWBORN CARE - (FOCUS ON CORD CARE, WARMTH, BREASTFEEDING)

Recommendations

1. Standardize information provided in various curricula.
2. Conduct periodic reviews of the health facilities to ensure the provision of quality basic care for all newborns.
3. Ensure that quality improvement mechanisms are in place with standardized tools such as checklists for quality of basic newborn care for all newborns.
4. Record any information in HMIS on cord care including the use of chlorhexidine for cord care at the community level.

5.1.6: NEONATAL RESUSCITATION

Recommendations:

1. Standardize information provided in various curricula.
2. Ensure retention of trained health care providers trained in newborn resuscitation.
3. Organize competency-based refresher trainings at regular intervals to enhance resuscitation skills.

5.1.7: KANGAROO MOTHER CARE - (FOCUS ON SKIN TO SKIN, BF, FEEDING SUPPORT FOR PREMATURE AND SMALL BABIES)

Recommendations:

1. A complete chapter /module need to be included in all facility and community based curricula.
2. Standardized uniform information must be provided for all level health care providers.
3. Capacity building of sufficient numbers of health care workers who have the necessary competencies for supporting KMC.

4. Supervision and/or mentoring guidelines and systems must be in place to support the provision of effective KMC including support for feeding of LBW babies.
5. Promote and monitor KMC in both public and private health care facilities by documentation of best practices.
6. Establish mechanisms to support and follow-up women and babies for KMC in the community.
7. Organization of activities for women and their communities by health care workers to increase knowledge on KMC issues.

5.1.8: TREATMENT OF SEVERE INFECTIONS

Recommendations:

1. Review the guideline managing possible serious bacterial infection in young infants when referral is not feasible.

2. Recommend a clinical algorithm for the assessment of newborn and identification of severe newborn infection.
3. Job description of various cadres which clearly authorize management and administration of injectable antibiotics for severe newborn infections.
4. Organize competency-based training programmes to provide necessary knowledge and skills to health care providers so that they can identify newborns with signs of severe illness and prescribe and or administer injectable antibiotics.
5. Include information in HMIS on the management of severe newborn infections.
6. Appropriate management and protocols of severe newborn infection must be available at all health facilities.
7. Ensure male involvement to facilitate care seeking for management and treatment of neonatal infections during the first week after birth.

5.1.9: INPATIENT CARE FOR SICK AND SMALL/ LBW BABIES - (FOCUS ON IV FLUIDS/ FEEDING SUPPORT AND SAFE OXYGEN)

Recommendations:

1. Organize and equip the health facilities for appropriate inpatient care and monitoring for sick and small/LBW babies.

2. Clear job description of various health care workers who are authorized to prescribe and/or administer IV fluids and oxygen to sick and small newborns.
3. Conduct competency-based training programmes through which the respective cadre of health care workers acquires the necessary knowledge and skills to provide in-patient care.

4. Ensure that quality improvement mechanisms are in place with standardized tools such as guidelines and check lists for quality of inpatient care for sick and small/LBW babies.
5. Include indicators to track the sick or small/LBW newborns that received extra care (number of newborns hospitalized.
6. Ensure that critical review of appropriate inpatient care for sick and small/LBW babies is included in protocols for clinical audits and peri-natal death reviews.
7. Develop strategies to facilitate the use of inpatient neonatal care services by sick and small/LBW newborns living in rural and remote areas.
8. Ensure referral mechanisms are in place between the community and health facilities to facilitate timely referral and access to care for all newborns.

5.2: CONCLUSION

The critical interventions for the newborn care are well reflected with general and specific information in facility and community based curricula. However, the information regarding treatment of severe infections and in-patient care for sick and small/LBM babies (Focus on IV fluids, feeding support and safe oxygen administration) are not specifically present.

The existing information in community and facility based curricula is based on the type of training, cadre and the mandate of respective cadre. The graphical design are interactive and user friendly for all the printed materials.

The Essential Newborn Care, Reference Manual Punjab, Pakistan and The Newborn Care, Resource Manual SCF can be used to develop training modules as required. However, both lack the pre-pregnancy health care which is a part of continuum of care for newborn health care package.

The draft of Newborn Strategy, Sindh has comprehensively encompassed the entire continuum of care for newborn care package. Likewise, Essential Maternal and Newborn Care Trainer Manual developed by The Khyber Institute of Child Health Peshawar have also described in detail the essential newborn care interventions.

The characteristic of the HBS training package is the use of low-cost, purpose-driven innovations that are integrated in the educational and quality improvement of newborn care. The resuscitation become integrated within a broader package of newborn care including early and exclusive breastfeeding, thermal protection, clean cord care, and early identification and management of infections and low birth weight babies.

The HBS training package can be adapted and integrated into the existing newborn training materials. However, it cannot be introduced as a standalone intervention. HBS can be introduced by conducting two-day training program through a training module or may be introduced within a complete integrated training that spans the MNCH continuum.

The newborn care program must be fully owned and led by the government and all donor and development partner. The program support should be guided and coordinated by the government to develop clear articulation and dissemination of national and sub-national policy, strategic plans, and clinical guidelines on HBS. The national health management information system should be able to capture relevant data on resuscitation and the data should be used to guide program management. The equipment to resuscitate newborns should be made available in all facilities. Funds need to be allocated in the national and/provincial budgets to support the standardized integrated newborn care package and service delivery procurement and logistics systems should be made effectively functional.

5.3: RECOMMENDATIONS

5.3.1: ADVOCACY

1. All training materials must be reviewed, adapted, standardized and endorsed by a Technical Review Committee.
2. Advocate for development of clear Human Resource training policy with special emphasis on standardization of pre-service and in-service trainings and selection of relevant staff.
3. Policy level support for incorporation of Helping Babies Survive training package and its integration into the existing newborn training materials. Initially, can be introduced as a pilot initiative and assessed for way forward.
4. Advocate that the use of prenatal Corticosteroids in management of preterm birth is integrated into existing newborn care guidelines as a part of Continuum of care.

5. Support to develop strategies to facilitate use of inpatient neonatal care services for sick and small/LBW newborns at all levels.
6. Support inclusion of a complete chapter /module on Kangaroo Mother Care and Chlorhexidine in all facility and community based curricula.
7. Advocate for development of protocols for inpatient neonatal care services for sick and small/Low Birth Weight newborns.
8. Advocacy to develop special home based care training curricula for home based care givers.

5.3.2: CAPACITY BUILDING

1. Encourage training of existing pool of master trainers and health providers who have already received trainings at the national/provincial/areas level for skill enhancement in Helping Babies Survive training package.
2. Organize competency-based refresher courses for Community Midwives and Health Care Providers on use of Partograph, resuscitation skills, identification of danger signs & severe illness in newborns and prescribe/ and or administer injectable antibiotics.
3. Capacity building of Health Care Providers in Behavior Change Communication and interpersonal Communication Skills.

5.3.3: COMMUNICATION FOR DEVELOPMENT

1. Promote and monitor Kangaroo Mother Care in both public and private health care facilities by documentation of best practices.
2. Pictures of Kangaroo Mother Care may be adapted to cultural specific context.

5.3.4: COMPLEMENTARITIES AND SYNERGIES

1. The existing training packages & resource manuals must be used to adapt, adopt according to the requirement.

5.3.5: COMMUNITY PARTICIPATION

1. Involve community elders and religious leaders to participate in awareness sessions on preterm birth prevention and the signs of threatened preterm birth and importance of early referral of women and babies needing preterm birth care.
2. Select champions in the communities for Kangaroo Mother Care promotion and information dissemination.
3. Ensure male involvement for seeking health care for newborn, referrals, management and treatment of neonatal infections.

5.3.6: MONITORING AND EVALUATION

1. Ensure quality improvement mechanisms (supervision and mentorship programmes, use of checklists, job-aids, periodic service reviews) are in place for skilled newborn care delivery services.
2. Inclusion of key newborn health care indicators in the health information systems like DHIS, LHW-MIS, CMW-MIS etc.
3. Ensure that national standards treatment guidelines & clinical protocols are available for Health Care Providers.
4. Ensure that equipment and supplies needed for Newborn care are available and functioning.
5. Research, data analysis, record keeping and evaluation for newborn care must be supported by donor agencies.

5.3.7: SUSTAINABILITY

1. Government leadership and ownership of the newborn care program, institutionalization within national plans, budgets, health systems and public awareness is required for its sustainability.
2. Strengthen and support existing mechanisms to support and follow-up women and babies for Kangaroo Mother Care in the community.
3. Ensure referral mechanisms are in place between community and health facilities through community participation to facilitate timely referral and access to newborn care.

CHAPTER 6 - NATIONAL CONSULTATIVE MEETING

The detailed report of national consultative meeting is attached as annex 6.

6.1: OBJECTIVE

1. To present the desk review findings of the existing facility and community based curricula, nine critical newborn care interventions and the way forward to adapt Helping Babies Survive training package.
2. To finalize conclusions, recommendations, opportunities and the way forward for replication and /or scaling up of the effective essential newborn care training package at the country level.

6.2: RECOMMENDATIONS

6.2.1: RESOURCE ALLOCATION

16. There is a need to increase the allocation for health sector from 0.6% to 4% of GDP.

6.2.2: TECHNICAL WORKING GROUP

17. A Technical Working Group may be constituted to review/ oversee the entire process of standardization and incorporation of selected modules.
18. Develop one training manual to address all the nine critical interventions being adopted at international and regional levels including the nutritional component, catering all level of health care delivery. (Separate module for each level).
19. The standardized integrated newborn care training package needs to be adapted and translated in cultural specific contexts for provinces and areas.

6.2.3: HELPING BABIES SURVIVE PACKAGE

20. The Helping Babies Survive training package can be adapted and integrated into the existing newborn training materials. It can be introduced as a pilot initiative and assessed for way forward.

6.2.4: HEALTH SYSTEM STRENGTHENING

21. System approach must be adopted for accountability and M&E mechanisms.

22. The critical interventions essential for newborn survival need to be implemented by training health care providers on a uniform standardized training format and a training database should be maintained.
23. Provision of enabling environment for practicing the skills acquired through training packages at different levels of application.
24. A pool of master trainers and health providers must be identified and database be maintained at the national/provincial/areas level for roll out of the HBS training package.
25. To develop strategies to facilitate use of inpatient neonatal care services for sick and small/LBW newborns living in rural and remote areas.
26. Latest agenda and related information may be shared with districts. This will facilitate districts in implementation of new guidelines/standards, etc.
27. Linkages need to be developed with academia, Pediatric associations, etc for technical guidance and inputs.

6.2.5: QUALITY ASSURANCE

28. Quality improvement mechanisms should be ensured by having standardized tools such as guidelines and check lists for quality of various trainings, implementation and service delivery.
29. Research, database, data analysis, record keeping and evaluation are the prerequisites to enhance newborn care across the board should be encouraged.
30. Specific indicators must be developed and incorporated in existing MIS/DHIS to measure various interventions.