

COMMUNITY MIDWIFERY EDUCATION PROGRAM IN AFGHANISTAN

Khalil Ahmad Mohmand

August 2013



Public Disclosure Authorized

Public Disclosure Authorized

Public Disclosure Authorized

Public Disclosure Authorized

Public Disclosure Authorized

**COMMUNITY MIDWIFERY EDUCATION PROGRAM IN
AFGHANISTAN**

Khalil Ahmad Mohmand

August 2013

Health, Nutrition, and Population (HNP) Discussion Paper

This series is produced by the Health, Nutrition, and Population (HNP) Family of the World Bank's Human Development Network. The papers in this series aim to provide a vehicle for publishing preliminary results on HNP topics to encourage discussion and debate. The findings, interpretations, and conclusions expressed in this paper are entirely those of the author and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent. Citation and the use of material presented in this series should take into account this provisional character.

For information regarding the HNP Discussion Paper Series, please contact the Editor, Martin Lutalo at mlutalo@worldbank.org or Erika Yanick at eyanick@worldbank.org .

Health, Nutrition, and Population Discussion Paper

Community Midwifery Education Program in Afghanistan: Striving for Safe Delivery

Khalil Ahmad Mohmand^a

^a Social and Health Development Program (SHDP), Kabul, Afghanistan

This paper was funded by the Bank-Netherlands Partnership Program for Sexual and Reproductive Health in the South Asia Region.

Abstract: In the immediate postconflict period, Afghanistan's health services were in a deplorable and chaotic state. In 2002, Afghanistan's maternal mortality ratio, for example, was the second highest in the world.

Access and utilization of reproductive health services and skilled care during pregnancy, childbirth, and the first month after delivery are key to saving those women at risk of dying due to pregnancy and childbirth complications.

In a society where women seek care only from female providers, one barrier to expansion of services was the lack of qualified female health workers who could be deployed to remote health facilities. Very few midwives who had trained in Kabul or other big cities were willing to work in rural areas (where the needs were much higher), and there were no education facilities and too few female school graduates who could be trained in the provinces. As maternal health was one of the top priorities of the health sector, the shortage of midwives to provide reproductive health services had to be tackled urgently. Hence the Community Midwifery Education (CME) Program was created.

The program aimed not only to train more midwives, but also to ensure both their initial deployment in remote health facilities as well as good retention rates. These aims were realized through the creation of a new health cadre known as "community midwives," along with new competency-based curricula; establishment of CME schools in each province; relaxation of the admission criteria for students (to have enough female students from each province receive training in their own province); and establishment of a strong accreditation board to ensure qualified midwives were trained by the program.

The program's success is attributed to stakeholder strong engagement, equity, and strengthened human resource for health. This approach worked well: maternal mortality fell from 1,600 in 2002 to 327 in 2010. The midwives have helped to plug the shortfall of professional human resources in health, especially for midwives and female health workers in rural and remote areas. Since their deployment in community clinics and hospitals, midwives have seen a vast increase in the use of general health care by women in the community, with a particular rise in maternal and child health services. Largely for this reason the program should be expanded to address the continuing shortage of midwives.

The CME Program — through selecting women from local communities, providing training, and deploying them back to their communities — sustains impact. Trained midwives are community resources who can have long-lasting and sustainable impact through their services to the community. The MoPH considers the program a successful intervention and believes that there is great potential to replicate this model to train other health professionals and tackle the shortage of other human resources for health. MoPH already started the Community Health Nursing Education Program, which is built on the successful experiences and lessons learned from the CME Program.

Keywords: Afghanistan, maternal, midwifery, education, success.

Disclaimer: The findings, interpretations, and conclusions expressed in the paper are entirely those of the authors, and do not represent the views of the World Bank, its Executive Directors, or the countries they represent.

Correspondence Details: Please contact Dr. Sayed Ghulam, Senior Health Specialist, World Bank office in Kabul at gsayed@worldbank.org; or 93-70-113-3342 (telephone).

Table of Contents

ACKNOWLEDGMENTS	VII
ACRONYMS	VIII
EXECUTIVE SUMMARY	1
BACKGROUND	1
RATIONALE FOR STARTING THE COMMUNITY MIDWIFERY EDUCATION PROGRAM	1
CME PROGRAM DESCRIPTION	2
<i>Recruitment</i>	2
<i>Admission</i>	2
<i>Training and Curriculum</i>	2
<i>Accreditation</i>	3
<i>Deployment and Retention</i>	3
METHODOLOGY AND MARKS OF SUCCESS	3
<i>Methodology</i>	3
<i>Strong Engagement of Different Stakeholders</i>	3
<i>Equity</i>	3
<i>Strengthened Human Resources for Health</i>	4
<i>Reproductive Health Services</i>	4
<i>Stakeholders' Perspectives on Dimensions of the Program</i>	4
<i>Sustainability and Scaling-Up</i>	4
CHALLENGES.....	5
RECOMMENDATIONS	5
I. INTRODUCTION	6
BACKGROUND	6
RATIONALE FOR STARTING THE COMMUNITY MIDWIFERY EDUCATION (CME) PROGRAM	6
PURPOSE OF DOCUMENTING THE CME PROGRAM	9
II. METHODOLOGY FOR DOCUMENTING SUCCESSES.....	10
LITERATURE REVIEW	10
FOCUS GROUP DISCUSSIONS	10
KEY INFORMANT INTERVIEWS	10
III. CME PROGRAM DESCRIPTION.....	11
RECRUITMENT.....	11
ADMISSION.....	11
TRAINING AND CURRICULUM.....	12
ACCREDITATION.....	13
DEPLOYMENT AND RETENTION	15
IV. MARKS OF SUCCESS.....	17
STRONG ENGAGEMENT OF DIFFERENT STAKEHOLDERS	17
EQUITY.....	17

STRENGTHENED HUMAN RESOURCES FOR HEALTH	17
GREATER USE OF REPRODUCTIVE HEALTH SERVICES.....	18
STAKEHOLDERS' PERSPECTIVES ON DIMENSIONS OF THE PROGRAM.....	25
SUCCESS STORIES	31
SUSTAINABILITY AND SCALING-UP	32
V. CHALLENGES.....	33
VI. RECOMMENDATIONS	34
VII. REFERENCES.....	36
ANNEX	39

ACKNOWLEDGMENTS

This paper was prepared as part of a series of studies on Sexual and Reproductive Health in the South Asia Region coordinated by Sameh El-Saharty, Senior Health Policy Specialist and Managing Editor of the Bank-Netherlands Partnership Program (BNPP) regional series. This regional program is carried out under the guidance of Julie McLaughlin, Sector Manager, South Asia Region.

The author would like to express his gratitude to all those who supported this report, particularly Dr. Khalid Sharifi, whose help, stimulating suggestions, experience, and encouragement helped in writing the report. The author is also grateful to Dr. Sayed Ghulam, Senior Health Specialist; Sameh El-Saharty, Senior Health Policy Specialist; and Benjamin Loevinsohn, then Lead Health Specialist in the South Asia Region, for their comprehensive review. Indeed, their constructive insight, suggestions, and recommendations enriched the report.

The author would also like to thank the leadership of the Ministry of Public Health, its directorates, the Afghanistan Midwives Association, and the National Midwifery Education Accreditation Board for providing valuable inputs and information to complete this report.

He is deeply grateful to the local communities and all study participants in Kabul and the provinces alike, for their enthusiastic participation and openness in sharing their views during the study.

Finally, the author is grateful to the World Bank for providing this opportunity to work on this project and for publishing this report as an HNP Discussion Paper.

Khalil Ahmad Mohmand
MD, MBA, MPH

ACRONYMS

AMA	Afghanistan Midwives Association
AMS	Afghanistan Mortality Survey
ANC	Antenatal care
BPHS	Basic package of health services
CHNE	Community Health Nursing Education
CME	Community Midwifery Education
EmOC	Emergency obstetric care
FGD	Focus group discussion
HMIS	Health Management Information System
MICS	Multiple Indicator Cluster Survey
MMR	Maternal mortality ratio
MoPH	Ministry of Public Health
NMEAB	National Midwifery Education Accreditation Board
NRVA	National Risk and Vulnerability Assessment Survey
RAMOS	Reproductive Age Mortality Survey
SBA	Skilled birth attendant
SEHAT	System Enhancement for Health Action in Transition
UN	United Nations
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

BACKGROUND

In 2001, in the immediate postconflict period, Afghanistan's health services were in a deplorable and chaotic state. Capacity in the public and the private sector alike was limited, and the outlook for the future was unclear. The major constraints for an effective health system were lack of managerial and service delivery capacity within the Ministry of Public Health (MoPH); lack of physical infrastructure and qualified personnel; poor distribution of financial and human resources; and uncoordinated and undirected efforts of many nongovernmental organizations (NGOs) in the country.

The MoPH with its partners, the World Bank, European Commission, and the United States Agency for International Development (USAID) initiated efforts to rehabilitate the devastated health care system. In 2002, supported by major donors and other stakeholders, the MoPH developed a basic package of health services (BPHS) that would form the technical foundation of primary health services across the country. The BPHS provided clear guidelines for the services to be delivered, types of health facilities, staffing needs, pharmaceuticals required, and infrastructure to be built. The BPHS determined both the MoPH's major priorities for rebuilding the national health system, as well as those health services, vital in addressing the greatest health problems, that should be universally available to all Afghans, including those living in remote and underserved areas.

The MoPH contracted NGOs for the delivery of BPHS. This approach worked well and has proved to be a rapid way for the MoPH to gain and maintain its stewardship.

RATIONALE FOR STARTING THE COMMUNITY MIDWIFERY EDUCATION PROGRAM

Afghanistan's maternal mortality ratio (MMR) was the second highest in the world in 2002, at 1,600 per 100,000 live births, and the ratio in Badakhshan province was the highest ever reported, at 6,500 anywhere. About 77 percent of Afghanistan's population was living in rural areas, where women are usually excluded from access to skilled and emergency health care.

Access and utilization of reproductive health services and skilled care during pregnancy, childbirth, and the first month after delivery are key to saving those women at risk of dying due to pregnancy and childbirth complications. But in 2002, only 28 percent of all reporting primary health facilities with basic antenatal care services, and only 18 percent offering delivery services, possessed all the necessary equipment and employed a female clinician. Likewise, in 2003, among all the BPHS facilities that reported delivery care services, only 19 percent had at least one female physician, 16 percent at least one midwife, and 15 percent at least one female nurse.

In 2003, most Afghan women delivered at home; fewer than 10 percent of births were attended by a skilled provider; and one Afghan woman died every 30 minutes from pregnancy-related causes.

To improve these dire statistics, it was essential to rapidly mobilize female health care providers, especially in rural areas. But given Afghanistan's conservative society, where women seek care only from female providers, an important barrier to the expansion of services was the lack of qualified female health workers who could be deployed to remote health facilities. As maternal health was one of the top priorities of the health sector, the shortage of midwives to provide reproductive health services had to be tackled urgently. Yet very few midwives who had trained in Kabul or other big cities were willing to work in rural areas (where the needs were much higher), and there were no education facilities and too few female school graduates who could be trained in the provinces. Hence the Community Midwifery Education (CME) Program was created to plug these gaps.

The program aimed not only to train more midwives, but also to ensure both their initial deployment in remote health facilities as well as good retention rates. These aims were realized through the creation of a new health cadre known as "community midwives," along with new competency-based curricula; establishment of CME schools in each province; relaxation of the admission criteria for students (to have enough female students from each province receive training in their own province); and establishment of a strong accreditation board to ensure qualified midwives were being trained by the program.

CME PROGRAM DESCRIPTION

The CME Program consists of the following closely interlinked stages, each guided by sets of standards. Improper implementation in one phase would negatively affect subsequent stages.

Recruitment

Candidates for the program are recruited from provinces and rural areas, according to the country's human resources workforce planning needs. Ideally they should have a "commitment letter" from their family and community indicating that they are going to work in an identified health facility with a midwife shortage. Students are selected jointly by the local MoPH authority, the implementing agency, and the community.

Admission

Admission to the program is based on national admission policy and criteria. All candidates should meet the admissions criteria (including age and years of schooling) and must pass the entrance exam.

Training and Curriculum

Originally, the program-standardized curriculum of 2003 required 18 months' training; however, in light of lessons of the past several years of running the programs, stakeholders consensually lengthened training to two years. It is divided into three

phases. A series of learning modules in phases 1 through 3 contain theoretical content and clinical skills considered necessary to prepare midwives to provide comprehensive maternal, newborn, and infant care. Phase 1 covers management of normal pregnancy, labor, postnatal, and newborn care. Phase 2 builds the student's skills in management of complications of pregnancy and childbirth. Phase 3 addresses other reproductive health topics, with a focus on family planning as well as management of service provision and professional issues.

Accreditation

This is an important part of any comprehensive national program to enhance the quality of education and health care services in the country. It has played a significant role in the overall improvement in both the quality of midwifery graduates and the quality of care provided by midwives in general. Accreditation is administered by the National Midwifery Education Accreditation Board (NMEAB).

Deployment and Retention

Admission guidelines aim to ensure that students are recruited from areas where they can be deployed, supported, and supervised after completing the program. Although there are no particular data available on the retention (defined as the midwife working in the public sector) and deployment of community midwives at the national level; based on an assessment of 11 provinces, the overall retention rates of CME graduated midwives in the public sector is 61.3 percent, with 36.8 percent working at their original deployment sites.

METHODOLOGY AND MARKS OF SUCCESS

Methodology

Various data collection tools and methods were employed to validate findings. These include a literature review, interviews with key informants, and focus group discussions with community representatives and health committees. Data were collected from seven provinces: Badakhshan, Jawzjan, Kabul, Kunduz, Maidan-Wardak, Takhar, and Urozgan.

The program's success is attributed to the following conditions:

Strong Engagement of Different Stakeholders

An important dimension of the CME Program's success is the involvement of different stakeholders in designing, nurturing, running, and evaluating the program. The need for this program was communicated across the wide spectrum of stakeholders — from those engaged in policy to those involved in implementation, from donors to communities.

Equity

The program has encouraged community involvement in all stages. It has emphasized equality by providing resources to remote rural communities and respecting people's rights to use resources equally in rural and remote areas. It has also focused on gender by providing opportunities for women in rural areas to receive an education and earn a living, and by offering basic health services to women without access to them.

Strengthened Human Resources for Health

The program's training and deployment of community midwives strengthened professional human resources for health and the overall health system by expanding access to high-quality health services. Between its launch in 2002 and by February 2013, 2,101 community midwives had graduated from CME schools — compared to a decade earlier when only 467 midwives existed throughout the country.

Reproductive Health Services

In provinces with graduating community midwives, a proportional increase of 39.0 percent in the use of antenatal care (ANC) and 62.3 percent increase in the use of skilled birth attendants (SBAs) is reported compared to provinces without graduating midwives. The midwives, as part of the human resource for health, played a key role in expanding and improving access to health services. The overall utilization of ANC services more than tripled and SBAs increased from 14 percent to 34 percent during the period 2003 to 2010. The increased access to services has been especially marked in rural areas.

Stakeholders' Perspectives on Dimensions of the Program

All involved parties appreciate the tangible progress made in access and utilization of health care and reproductive health services because of the program. They consider it one of the biggest health achievements of the last decade. Midwives have helped to plug the shortfall of professional human resources in health, especially for midwives and female health workers in rural and remote areas. The stakeholders also believe that midwives have significantly helped to reduce maternal mortality (it fell from 1,600 in 2002 to 327 in 2010). Stakeholders also acknowledge that deployed midwives address the need of communities for health services. The communities, themselves, believe that people now have easy access to services, and more women are visiting and using the health facilities.

The role of community midwives as change agents is well recognized among health sector stakeholders, including the communities themselves. Midwives facilitate behavior change at the family and community levels. Health-seeking behavior has picked up, and more people (especially women) are visiting health facilities. People's knowledge of health services, particularly reproductive health, has improved, as have their attitudes and practices. Finally, graduated midwives themselves have also seen huge changes in their own personal and social lives, and most are satisfied with their earnings and changed social status in their communities as health service providers.

Sustainability and Scaling-Up

The MoPH considers the program a successful intervention and believes that there is great potential to replicate this model to tackle the shortage of other human resources for health. According to MoPH, it has already started the Community Health Nursing Education (CHNE) Program, which is built on the successful experiences and lessons learned from the CME Program. Likewise, MoPH is exploring options to replicate the CME model for training other health professionals, such as laboratory technicians and physiotherapists.

CHALLENGES

Needless to say, there have been bumps along the road. A frequently reported difficulty has arisen in the selection of students for CME, jeopardizing later stages, including training, deployment, and retention. Various problems include influence peddling (including the use of force) by local potentates and as well the lack of eligible students in some targeted communities. Deployment and retention of midwives working at their original deployment sites are other challenges.

Accreditation of the CME schools is sometimes challenging, especially in those provinces where security is a major problem. The limited number of NMEAB assessors presents an additional difficulty for accreditation.

Postdeployment supervision and follow-up of graduates in BPHS health facilities is reported to be less than optimal. Lack of a national tracking system for CME-graduated midwives is also a burden.

RECOMMENDATIONS

All stakeholders strongly recommended the following:

- The CME Program should be continued and expanded to address the shortage of midwives.
- Program standards should be enforced in the selection and training phase to improve retention.
- The capacity of NMEAB should be developed and the number of board assessors increased to improve accreditation.
- Postdeployment supervision of midwives at health facilities and postgraduation follow-up and tracking mechanisms for midwives within the MoPH human resource information system should be initiated and maintained.
- MoPH should develop strategies and policies for equitable, gender-sensitive working conditions, for instance schooling for children, housing arrangements, and job opportunities for unemployed husbands.

I. INTRODUCTION

BACKGROUND

In the immediate postconflict period in 2001, Afghanistan's health services were in a deplorable and chaotic state. Capacity in the public and private sectors alike was limited, and the outlook was unclear. Lack of managerial and service delivery capacity within the Ministry of Public Health (MoPH); lack of physical infrastructure and qualified personnel; poor distribution of financial and human resources; and, uncoordinated and undirected efforts of the nongovernmental organizations (NGOs) were major constraints (Waldman, Strong, and Wali 2006).

The European Commission, the United States Agency for International Development (USAID), and the MoPH made efforts to rehabilitate Afghanistan's devastated health care system. During the period 2002 to 2004, the National Health Policy (NHP) and National Health Strategy (NHS) were developed (Afghanistan, APHI/MoPH 2010).

In 2002, MoPH, with the support of major donors and other stakeholders, developed a basic package of health services (BPHS) that would form the technical foundation of primary health services across the country. BPHS documents provided clear guidelines for services to be delivered, types of health facilities, staffing needs, pharmaceuticals, infrastructure, catchment, and population coverage (Waldman, Strong, and Wali 2006).

The BPHS determined MoPH's top priorities for rebuilding the national health system, and the health services, vital in addressing the greatest health problems, that should be available to all Afghans, especially those living in remote and underserved areas. The key criteria for selection of services in the BPHS were services that would have the greatest impact on major health problems; were cost-effective in addressing the problems faced by many people; and could be delivered to ensure equal access to rural and urban populations (Afghanistan, MoPH 2003).

MoPH contracted NGOs to deliver the BPHS. This approach worked well and has proved to be a rapid way for MoPH to expand health services across the country and gain and maintain its stewardship (Loevinsohn and Sayed 2008).

RATIONALE FOR STARTING THE COMMUNITY MIDWIFERY EDUCATION (CME) PROGRAM

In 2002, the maternal mortality ratio (MMR) in Afghanistan was the second highest in the world, at 1,600 per 100,000 live births; in Badakhshan, one of the most remote parts of the country, the rate was the highest in the world ever reported, at 6,500 (Bartlett et al. 2005). The vast majority of maternal deaths were avoidable. The largest proportion of such deaths are caused by obstetric hemorrhage, mostly during or just after delivery, followed by eclampsia, sepsis, and complications of unsafe abortion (Khan et al. 2006; De Bernis et al. 2003; Save the Children 2011). Use of timely and cost-effective interventions could prevent more than 80 percent of these deaths (Prata et al. 2009; WHO 2004; Save the Children 2010).

About 15 percent of pregnancies and childbirths need emergency obstetric care (EmOC) because of complications that are difficult to predict (UNICEF, WHO, and UNFPA 1997).

Generally, steady access to health services has been challenged by various factors including disproportionate concentration of health facilities with midwifery services (including EmOC) in urban rather than rural areas, creating a barrier to access to reproductive health services (Chaudhury 2008). Rural and poor women were mostly excluded from accessing skilled and emergency care (Islam and Yoshida 2009) — in a country with a population that is 77 percent rural (CSO 2009).

Access and utilization of reproductive health services and skilled care during pregnancy, childbirth, and the first month after delivery are key to saving those women at risk of dying due to pregnancy and childbirth complications (Buor and Bream 2004; UNICEF 2012; Chowdhury et al. 2007). In 2002, only 28 percent of all BPHS facilities who reported providing basic antenatal care (ANC) services and only 18 percent of such facilities offering delivery services possessed all the necessary equipment and employed a female clinician (Afghanistan, Ministry of Health 2002). In 2003, half of primary health facilities reported that they did not provide delivery care, and among all BPHS facilities that reported providing delivery care services, only 19 percent had at least one female physician; 16 percent had at least one midwife; and 15 percent had at least one female nurse. Only 13 percent of district hospitals were capable of providing a basic set of emergency obstetric care services, while only 18 percent of regional, national, and provincial hospitals had the capacity to perform comprehensive EmOC (UNFPA 2003).

The shortage of qualified human resources, especially female health workers including midwives, was a huge challenge for expanding the BPHS. Women in rural areas felt (and still feel) uncomfortable discussing their problems with a male health worker. In Afghanistan's conservative society, female health workers are preferred for women patients.

In 2002, before the CME Program was launched, nurse-midwifery programs existed in only six of the country's campuses of the Institute of Health Sciences (Currie, Azfar, and Fowler 2007). Their absorptive capacity was approximately 50 to 100 students a year, and only 12th-grade graduates were admitted. Given that the previous Taliban regime had not permitted education for girls, finding 12th-grade graduates was very difficult, particularly in the provinces; as graduates from the institute's schools were mainly city-dwellers, the likelihood that they would work in the provinces and remote areas was very low.

Given this pressing need, MoPH recognized the importance of increasing the number of female health care workers in the health workforce to address the health needs of women and children (Afghanistan, MoPH 2006).

The government endorsed the Millennium Declaration in March 2004 and committed to achieving the Millennium Development Goals (MDGs), including goals 4 and 5. The target for goal 4 was to reduce the under-five mortality rate by 50 percent between 2003 and 2015, and to further reduce it to one-third of the 2003 rate by 2020. The target for

goal 5 was to reduce MMR by 50 percent between 2002 and 2015, and further reduce it to 25 percent of the 2002 level by 2020 (The Islamic Republic of Afghanistan 2010).

To attain MDGs 4 and 5, it is vital to strengthen midwifery capacity to provide skilled attendance at every birth (Bogren, Wiseman, and Berg 2012). The importance of skilled attendance during childbirth is indicated by historical and epidemiological data that show that, where births are attended by skilled health professionals, including midwives, the ratio of maternal deaths and morbidity decrease (Family Care International 2002). An important step toward improving women's health is to increase the proportion of deliveries attended by health professionals. MDG 5 underscores the crucial value of skilled birth attendance as a mechanism to reduce maternal mortality (Family Care International 2002; WHO 2010). These interventions require a person with midwifery competence, including obstetric skills, to prevent complications and take timely actions (De Bernis et al. 2003).

Qualified midwives provide one of the most effective interventions to reduce deaths in pregnancy and childbirth (De Bernis et al. 2003; WHO 2004; Family Care International 2002; UNFPA 2006; Fauveau et al. 2008). In 2003, most Afghan women delivered at home, and fewer than 10 percent of births were attended by a skilled provider. That year, one Afghan woman was dying every 30 minutes from pregnancy-related causes (Bartlett et al. 2005). Hence rapid mobilization of female health care providers, especially in rural areas, was essential to reduce these shocking statistics (Currie, Azfar, and Fowler 2007).

During the early days of reconstruction, Afghanistan's maternal and neonatal mortality statistics prompted the international health community to prioritize health policy and planning over many other pressing needs. The reduction of MMR in Afghanistan became the priority of the country's interim government and remains an integral part of the key strategy for MoPH, as well as for donors, NGOs, and other international organizations working to improve the overall health of the Afghan people (Currie, Azfar, and Fowler 2007).

These organizations faced several challenges in developing a comprehensive approach on this issue. Their assessment revealed a severe shortage of skilled health care providers, specifically female providers: one province had only two female providers; and the total number of midwives was estimated at 467 (Ibid.).

To fulfill the country's need for skilled attendants, MoPH focused on training midwives as opposed to nurses or nurse-midwives. Afghanistan needed female providers who could concentrate entirely on maternal and neonatal health, rather than divide their energies across the full range of health services. The need to improve women's and children's health in the challenging context of postconflict Afghanistan provided a unique opportunity for midwives to develop their skill and to be the sole health providers for most Afghan women (Ibid.).

The government worked with local and international partners to implement a comprehensive approach to developing and supporting this much-needed cadre of health workers, which involved expanding CME; creating policies to ensure the pivotal role of

midwives in providing essential obstetric and newborn care; supporting the establishment of a professional association for midwives; and developing initiatives to increase access to skilled care during childbirth (Fauveau et al. 2008). This program also helped to resolve the problem posed by midwifery students from more rural areas who are educated in cities but often do not return to work in their communities (Currie, Azfar, and Fowler 2007).

The program can be considered the almost perfect public–private partnership, where the government plays the capable steward, and NGOs largely implement the program in the field.

PURPOSE OF DOCUMENTING THE CME PROGRAM

The objective of the review was to document (ultimately in this report) the successful experience of the CME Program in Afghanistan, particularly to identify factors that enabled the program to deliver as envisaged, to highlight key lessons, and to make recommendations.

This report will be shared with health sector stakeholders in Afghanistan and in other South Asian countries. The MoPH could use this document in two main ways: first, to share its successes over the last decade with the outside world; and second, based on this experience, to explore options to replicate the CME approach to address the shortage of other important health professionals in remote areas of Afghanistan.

II. METHODOLOGY FOR DOCUMENTING SUCCESSES

Data were collected from seven provinces: Badakhshan, Jawzjan, Kabul, Kunduz, Maidan-Wardak, Takhar, and Urozgan. The following data collection methods and tools were employed for validating findings.

LITERATURE REVIEW

To obtain comprehensive knowledge and information of different dimensions of the CME Program, a desk review of relevant documents was carried out as the main approach. During this stage, efforts were made to explore information about all aspects of the program, including its general structure, curriculum, standards, duration, and implementation modalities. The literature review explored how the program was viewed by MoPH, implementing agencies, donors, United Nations agencies, and communities. It included background information on the program; program-guiding documents including policies, program reports, evaluations, and assessments; findings of studies and research (published and unpublished); general data and information; and a review of literature on similar contexts.

FOCUS GROUP DISCUSSIONS

Focus group discussions (FGDs) were conducted with community representatives, separately for men and women. The FGDs aimed to capture community views on different aspects of the program, including changes after deployment of midwives in their village or district clinic; outstanding achievements by midwives in their community; and community recommendations for improving the program. FGDs were conducted using FGD guides with open and exploratory questions.

KEY INFORMANT INTERVIEWS

In-depth interviews with key informants were held to obtain a vivid picture of their opinions of the program. Key informant targets included MoPH management staff at policy level, implementing NGOs, CME schools' management, provincial public health officials, provincial health managers, heads of health facilities, health facility staff, and graduated community midwives. Information was obtained on different aspects of the program including success and achievement of the program since inception; impact of the program; and challenges facing the program at different stages (selection, training, accreditation, deployment, and retention). These interviews were conducted using an interview guide with open-ended questions.

III. CME PROGRAM DESCRIPTION

The CME Program aims to prepare competent community midwives with requisite skills to manage normal and difficult pregnancies, including life-threatening complications of pregnancy; to promote health; and to reduce maternal and newborn morbidity and mortality, especially in remote and underserved areas.

The program consists of a number of phases that are closely interconnected. The implementation of each phase is guided by standards that must be considered during implementation. Improper implementation of one phase would negatively affect the subsequent phase.

RECRUITMENT

Recruitment and selection of students is a vital component of the program. Improper selection will ultimately jeopardize the training phase, deployment, and retention. Community involvement plays a crucial role in selection of the students, as candidates must be approved by the community.

Candidates for the program are recruited from the provinces and rural areas. Their recruitment is determined by the human resources workforce planning need for the relevant province. All candidates should have a “commitment letter” from their family and community indicating that they are going to work in an identified health facility facing a midwife shortage. The selection of students is a joint effort of local MoPH authorities, the implementing agency, and communities (Afghanistan, MoPH 2009).

ADMISSION

Admission of students to the CME Program is based on the national admission policy and criteria. All candidates must pass the entrance exam and should meet the admissions criteria (Ibid.). The criteria are a minimum of ten years of schooling (or successful completion of an equivalent amount of schooling through a bridging program); a minimum age of 18 years; a married status, preferably with children; selection by the community and willingness to relocate to the provincial capital for training; and amenability to deployment (at a preassigned clinic) to a specific district agreed on at the time of selection.

Initially the admission criterion was six to nine years of schooling, but in 2008 this was changed to nine to twelve years of schooling to allay tensions over perceived compromises of educational standards (Mansoor, Hill, and Barss 2012). In 2009 after the third edition of the CME curriculum was developed, the minimum was changed to ten years. For those candidates with fewer than ten years of schooling, who pass the entrance exam, the school — with the Ministry of Education (MOE) — should provide a program that enhances the academic skills of the candidate to ensure equivalency of ten years’ schooling (Afghanistan, Institute of Health Sciences 2009).

Graduates of the CME Program fit the definition of midwife adopted by the International Confederation of Midwives (ICM), the International Federation of Gynecology and Obstetrics (FIGO), and the World Health Organization (WHO).

TRAINING AND CURRICULUM

The CME Program is divided into three phases. A series of learning modules is included in phases 1 through 3, containing the theoretical content and clinical skills considered necessary to prepare midwives who can provide comprehensive maternal, newborn, and infant care. Phase 1 covers management of normal pregnancy, labor, postnatal, and newborn care. Phase 2 builds the student's skills in the management of complications of pregnancy and childbirth. Phase 3 addresses other reproductive health topics, with a focus on family planning and management of service provision and professional issues (Ibid.).

The midwifery educational curriculum used before 2001 was outdated in content and approach. The new midwifery-training curriculum incorporates the latest scientific evidence and competency-based learning approaches.¹ It was developed in a pilot project implemented by HealthNet TPO in the Eastern region of Afghanistan during the period 2002 to 2004 (Currie, Azfar, and Fowler 2007). In 2003, the program was standardized and endorsed by MoPH as the standard national curriculum to be used by all bodies running a CME Program (Afghanistan, Institute of Health Sciences 2009). In 2004, the curriculum and learning materials, along with a new job description for its graduate midwives, were finalized with support from Jhpiego (an affiliate of the Johns Hopkins University) and in consultation with all stakeholders (Currie, Azfar, and Fowler 2007).

The curriculum endorsed in 2003 was designed for 18 months' training to produce skilled midwives quickly, especially for rural areas. After five years, lessons and experiences from the program, along with administrative challenges, led MoPH, with stakeholder consensus, to increase the training period to two years (Afghanistan, Institute of Health Sciences 2009).

The curriculum presupposes that education and practice are firmly based in the community. The program follows an educational philosophy that serves as the normative base for its ethics and guiding principles. It acknowledges the uniqueness of the individual, whether student, client/patient, or teacher; promotes equal rights regardless of sex, race, religion, age, or nationality; is committed to a life-cycle perspective of reproductive health, with a special focus on women's health; includes a woman-centered approach that promotes safe motherhood; and increases students' awareness of family-health issues and sexuality within a framework of gender sensitivity (Ibid.).

The CME curriculum focuses on the unique role of midwives in promoting women's health through an educational approach that includes partnership with women to promote self-care and the health of mothers, infants, and families; respect for human dignity and for women as persons with full human rights; advocacy for women so their voices are

1. That is, learning by doing. It focuses on what is needed to carry out the procedure or activity. How the learner performs (a combination of knowledge, attitudes, and, most important, skills) is emphasized rather than just information.

heard; cultural sensitivity, including working with women and health care providers to overcome cultural practices that harm women and babies; and a focus on health promotion and disease prevention (Ibid.).

The CME Program defines programmatic and quality issues to be considered before and during the program. Consideration is given to the learning process, the learning environment, preparation of teachers and classrooms, selection of clinical sites, availability of learning resources, and preparation of a simulated practice environment, as well as taking into account certain scheduling issues. Programs must comply with the national accreditation program for midwifery education, which has set standards for the education of community midwives. There are national standards in five areas: classroom and practical instruction, clinical instruction and practice, school infrastructure and materials, school management, and clinical areas in which student midwives obtain clinical experience (Ibid.).

Practice in the clinical setting is essential for developing health care delivery skills. It helps prepare students for the roles and responsibilities they will hold. Hence a clinic site for CME students is selected in a health facility, with opportunities for each student to undertake a minimum of 25 competent deliveries, with the training and under the supervision of teachers (Ibid.).

ACCREDITATION

Accreditation is an important element in setting and maintaining quality of care (Braithwaite et al. 2012). Accreditation and clinical performance show a positive association (Ibid.).

Accreditation of the CME Program is an important aspect of a comprehensive national effort to improve the quality of education and health care to reduce maternal and newborn mortality. By itself, accreditation is not a sufficient initiative to reduce morbidity and mortality, but it is key to the overall improvement in quality of both midwifery graduates and of care provided by midwives (Smith et al. 2008).

In 2002, there was one Community Midwifery Education Program in Nangarhar province. By early 2007, there were 17 such programs run by various NGOs working with MoPH. During this rapid expansion, concerns were raised that the program might not be abiding by MoPH standards on quality. To ensure that all programs followed the standardized curriculum and upheld quality in teaching and learning, a National Midwifery Education and Accreditation Policy was developed by the Directorate of Human Resources in 2005 (Afghanistan, MoPH 2009; Afghanistan, Institute of Health Sciences 2009). The Midwifery Education Accreditation Program began in 2004 in a small group of midwifery schools and widened to all midwifery education programs in Afghanistan (Currie, Azfar, and Fowler 2007). The accreditation program was established with the participation of all schools as well as counterparts from the government and from donor and technical agencies (Smith et al. 2008).

The quality of midwifery education is ensured through proper function of the National Midwifery Education Accreditation Board (NMEAB) (Afghanistan, Institute of Health Sciences 2009.). This was established in 2005 based on recommendations of the National Midwifery Education and Accreditation Policy. The NMEAB is a semigovernmental body that serves as a national technical and regulatory authority for setting and maintaining high-quality midwifery education. As the first accreditation board in the country, the NMEAB has furthered the concept of quality in health worker education and has begun to influence the regulation of other educational programs in Afghanistan (Currie, Azfar, and Fowler 2007).

The accreditation process uses a performance- and quality-improvement approach. Schools first conduct an internal assessment using national educational standards in five areas: classroom and practical instruction; clinical instruction and practice; school infrastructure and materials; school management; and clinical care. These explicit and mutually agreed-on (between program and stakeholder) standards enable schools to identify gaps between desired and actual performance and undertake performance-improvement interventions. When schools achieve at least 80 percent of the standards — based on an external review by the NMEAB — they are “accredited” (Ibid.). By April 2007, 19 schools had undergone a binding accreditation assessment and were accredited (Braithwaite et al. 2010); by the end of 2010, out of 34 schools, 23 had been accredited (Bartlett et al. 2011).

In May 2005, the Afghan Midwives Association (AMA) was founded to strengthen and professionalize midwifery. The AMA continues to grow and is making significant contributions to improving the health of women and newborns in Afghanistan as well as in strengthening midwifery education and practices (Afghanistan, Institute of Health Sciences 2009). Stakeholders universally appreciate the role of the AMA in providing technical assistance to midwifery programs, advocating for midwives at policy level, assessing and improving midwifery programs, and increasing community awareness of the CME Program (Bartlett et al. 2011).

According to AMA, in 2010 a bill to establish the Afghanistan Midwives and Nurses Council (AMNC) was proposed to and agreed by MoPH. The bill was sent to the Ministry of Justice for approval; once it becomes an act, the AMNC will be set up. The AMNC, in addition to accrediting schools, will certify individual midwifery graduates. The NMEAB will be part of the AMNC.

The AMA is piloting a mentorship program for improving and maintaining midwives’ performance. This program is funded by the Swedish Committee for Afghanistan. Six provinces — Kapisa, Laghman, Maidan-Wardak, Parwan, Samangan, and Saripul — are currently covered by the program. Senior midwives travel to remote health facilities and provide necessary technical support (theoretical and skills-based) to midwives already deployed. The AMA will present the initial results of the initiative at the International Confederation of Midwives Triennial Congress, to be held in 2014 in Prague, Czech Republic.

DEPLOYMENT AND RETENTION

CME recruits female candidates from districts' remote areas, trains and then deploys them to health facilities in rural areas near midwives' homes. CME-graduated midwives will work as staff members of health facilities that implement the BPHS.

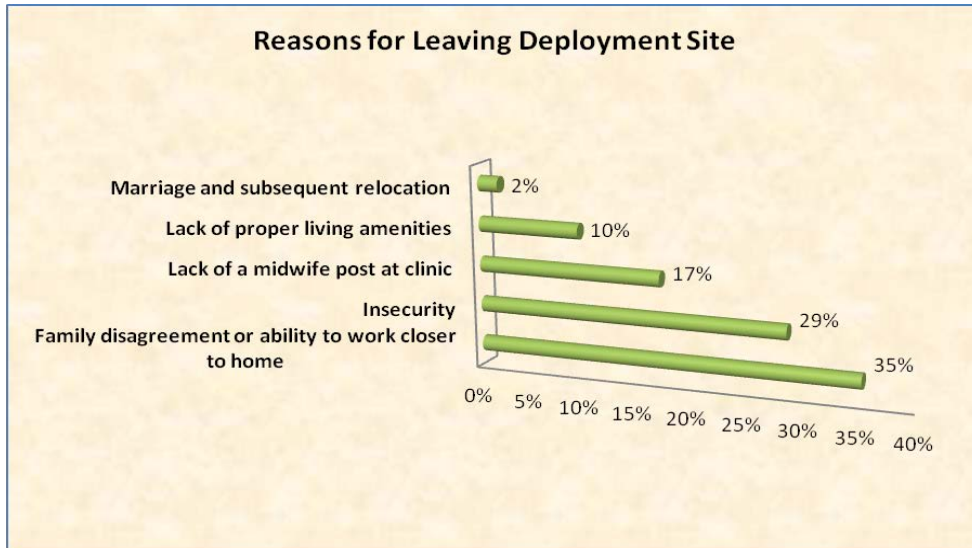
To support the sustainability and quality of midwifery education programs, admission guidelines aim to recruit and deploy midwives appropriately. MoPH, NGOs, and provincial health departments work together to carry out the programs, which helps to ensure that students are recruited from areas where they can be deployed and effectively supported and supervised after completing the program.

In Afghanistan — as in many countries — students recruited from rural areas and educated in cities often do not return to their communities after graduation. Therefore, candidates for the Community Midwifery Education Program are chosen by key members of their own communities and trained in their own province on the understanding that they will serve that community when they graduate. The candidate must also demonstrate close ties to that community and have the consent of her husband or father to undertake training. Evidence of such support by community and family is critical given that the education of women and girls remains a contentious subject in Afghanistan (Currie, Azfar, and Fowler 2007).

Although there are no national data on retention and deployment of community midwives, based on an assessment of 11 provinces, the overall retention rates of CME-graduated midwives in the public sector is 61.3 percent, with 36.8 percent working at their original deployment sites (Todd et al. 2012).

CME-graduated midwives leaving the deployment site gave various reasons, such as marriage, lack of proper living amenities, lack of post at clinic, insecurity, and family disagreement. Family support is essential for midwives to work in particular clinics. Factors that may cause family dissension include distance of job station (health facility); traditional requirement that a *mahram* (a male family member or relative) accompany the midwife; certain terms and conditions of the job in the health facility that may be unacceptable to the family; and personal circumstances of the midwife, such as responsibility to look after children and relatives. Additionally, after marriage, the husband or his family may not approve of the midwife's work (Ibid.).

Figure 1: Reasons for Leaving Deployment Site



Source: Todd et al. 2012.

IV. MARKS OF SUCCESS

STRONG ENGAGEMENT OF DIFFERENT STAKEHOLDERS

An important dimension of the CME Program's success is the close involvement of different stakeholders in designing, nurturing, implementing, and evaluating the program. The need for this program was communicated across the wide spectrum of stakeholders — from those engaged in policy to those involved in implementation, and from donors to communities.

Political will, resources, and community acceptance are important preconditions to launching and operating a development project — for the CME Program, funds, technical expertise, and political commitment of MoPH were in place from the start. Various organizations working with MoPH have heavily invested in strengthening the preservice education of midwives. MoPH has placed special emphasis on developing the program, demonstrating excellent leadership in its pragmatism and flexibility in addressing the shortage of this much-needed health resource.

Community involvement in health — the introduction, selection, deployment, and retention of CME students — is amply demonstrated and is one of the successes of the program. This fact is appreciated by CME graduates as well: they agreed strongly on the importance of community involvement in selecting candidates (Todd et al. 2012).

EQUITY

A human rights-based approach gives importance not only to outcomes but also to processes. Human rights standards and principles such as participation, equality and nondiscrimination, and accountability are to be integrated in all stages of health programming: assessment and analysis, priority setting, program planning and design, implementation, and monitoring and evaluation.

Elimination of all forms of discrimination is at the core of a human rights approach including, crucially, gender mainstreaming (WHO 2013). The CME Program has ensured and addressed the issue of participation by involving communities in all stages, including designing, priority setting, planning, and implementation. The program tackled inequity by providing resources to marginalized rural communities and by respecting people's right to use available resources equally in rural and remote areas. Finally, the program dealt with gender issues by providing opportunities for women in rural areas to receive an education and earn a living, and by offering services to women who did not have access to basic health services.

STRENGTHENED HUMAN RESOURCES FOR HEALTH

A knowledgeable, skilled, and motivated health workforce is critical for reaching universal health coverage. In addition to doctors and nurses, for example, community midwives make up a crucial portion of human resources for health and play a key role in providing access to high-quality health care. A stronger health system can be ensured

with enough skilled health workers. Availability and deployment of professional human resources for health strengthens any health system.

In 2003 there was a severe shortage of female skilled birth attendants; there were only 467 midwives in the country (Bartlett et al. 2011). After substantial efforts by the MoPH, donors, technical partners, and implementing NGOs, the launch of the CME Program dramatically addressed that shortage. By April 2013 (according to the NMEAB), 2,245 students had graduated as community midwives (table 1). The program addressed a key concern of the health system — access to maternal care. The deployment of midwives helped to ensure the availability of basic health services and emergency obstetric care at basic health centers (BHCs), as well as more comprehensive care at comprehensive health centers (CHCs) and district hospitals.

GREATER USE OF REPRODUCTIVE HEALTH SERVICES

The CME Program initially faced much resistance and many challenges. In 2004, Paul Sender, from the British NGO Merlin, said about the start of the program in Takhar province, “We had just 20 applicants for 20 places. It was considered a strange idea for a woman to go and live in a training compound, away from her family.” In its latest intake (reported in 2007), Merlin had 200 applicants for the same number of places (Walsh 2007).

After the introduction of midwifery programs in local communities, more women were seen outside their homes in some rural and conservative communities. Family restrictions against women’s mobility eased for women seeking care at the health facility and even for those attending school. As a result (and as noted above), the applicant pool for midwifery programs increased (Bartlett et al. 2011). This is a notable achievement, reflecting both the motivation of Afghan women and their families, and of the quality and cultural acceptability of the programs (Ibid.).

The training and deployment of community midwives has helped improve the population’s access to and use of reproductive health services. For instance, in provinces with midwifery schools that had graduated students by June 2006, ANC rates increased by 31.0 percentage points from 2003 to 2008 (to 39.9 percent), while provinces without midwifery schools (or which had no graduated students by June 2006) increased by only 18.9 percentage points (to 26.1 percent) — an absolute difference of 12.1 percentage points (Ibid.) (figure 2).

Table 1: Community Midwifery Education Program Summary (Updated April 2013)

Province	No. of batches	No. of graduates	Ongoing CME (start-end dates)	
Badakhshan	6 batches	109	Aug. 22, 2012	Aug. 21, 2014
Badghis	4 batches	79	**	**
Baghlan	4 batches	87	**	**
Balkh	2 batches	24	Nov. 1, 2012	Nov. 1, 2014
Bamyan	6 batches	131	**	**
Dikondi	2 batches	35	**	**
Farah	4 batches	50	July 16, 2011	July 16, 2013
Faryab	3 batches	70	**	**
Nangarhar	9 batches	204	**	**
Ghazni	1 batches	24	**	**
Ghor	4 batches	84	**	**
Helmand	3 batches	48	May 1, 2012	May 1, 2014
heart	1 batch	*	April 1, 2011	May 31, 2013
Jawzjan	5 batches	139	**	**
Kabul	1 batch	23	**	**
Kapisa	1 batch	*	Nov. 1, 2011	Dec. 1, 2013
Khost	5 batches	121	March 1, 2011	May 31, 2013
Kunar	1 batch	24	**	**
Kunduz	4 batches	82	**	**
Laghman	4 batches	81	**	**
Logar	3 batches	60	**	**
Nimroz	2 batches	20	1-Jan-12	2-Jan-14
Paktika	1 batch	24	**	**
Paktya	5 batches	140	**	**
Parwan	4 batches	172	**	**
Kandahar	1 batch	*	Sep. 1, 2011	Dec. 1, 2013
Samangan	3 batches	55	Dec. 20, 2004	Aug. 30, 2006
SariPul	4 batches	87	**	**
Takhar	5 batches	120	**	**
Urozgan	3 batches	20	Feb. 1, 2012	Jan. 1, 2014
Wardak	6 batches	111	Sep. 8, 2011	Sep. 8, 2013
Zabul	1 batch	21	**	**
Grand total		2,245		

Source: NMEAB.

* These provinces have had their first batch of CME, and do not have graduates yet.

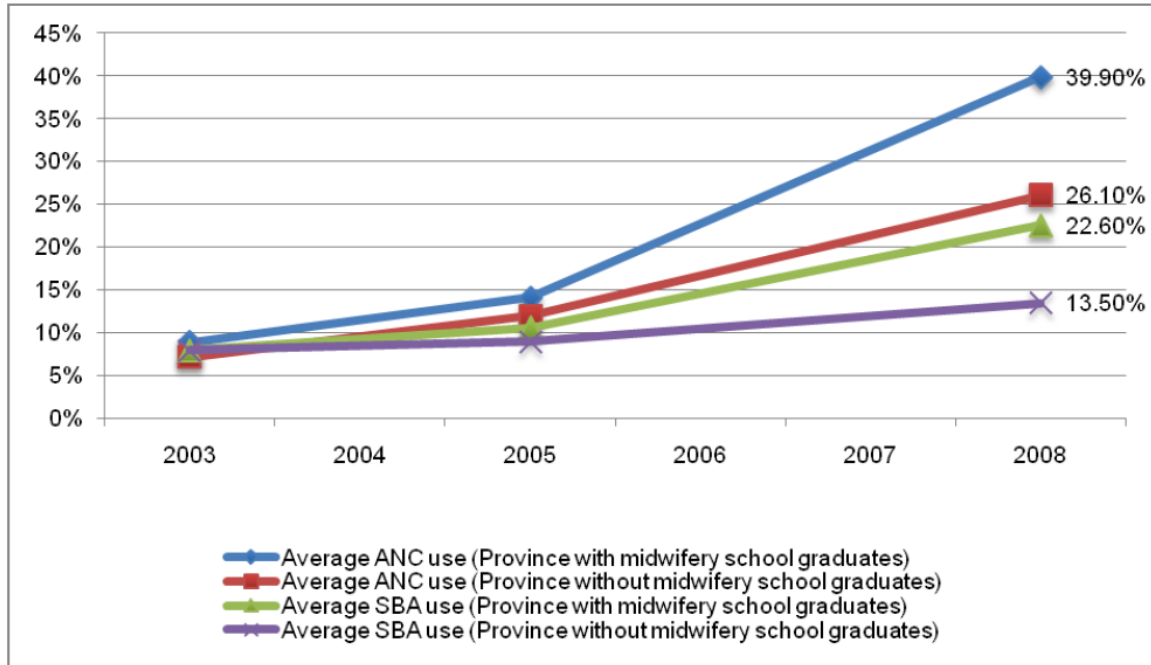
** NMEAB did not provide start and end dates.

Similarly, provinces that graduated midwives before June 2006 (table 2) reported a 14.6 percentage point increase in use of skilled birth attendants (SBAs) to 22.6 percent,

whereas provinces without midwives reported a 5.5 percentage point gain only to 13.5 percent — an absolute difference of 9.1 percentage points (Ibid.).

Community midwives undoubtedly played a key role in expanding and improving access to health services. ANC utilization, for example, appears to have more than tripled during the period 2003 to 2010. The increased access to services was especially marked in rural Afghanistan (Afghanistan, APHI/MoPH 2010).

Figure 2: Average ANC and Skilled Birth Attendance Use by Time and Treatment Group, 2003–08



Source: Jhpiego/Health Services Support Project, Kabul.

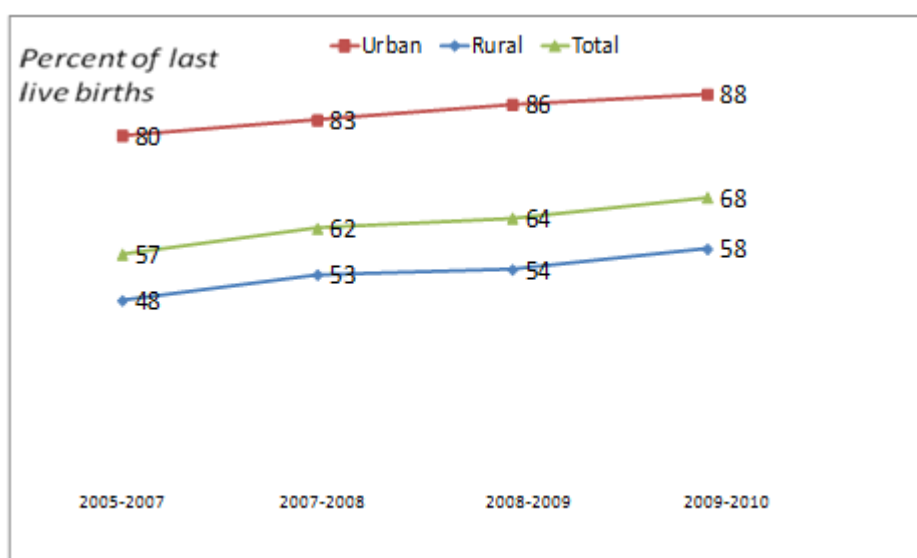
Table 2: Average ANC and Skilled Birth Attendance Use over Time (before and after 2006) by Treatment Group

	Average antenatal care (ANC) use		
	Time 1: before 2006 (before graduating a class)	Time 2: after 2006 (after graduating a class)	Difference (within group pre-post difference by time period)
Provinces with midwifery school with at least one graduating cohort by 2006 (treatment)	8.9%	39.9%	31.0 percentage points
Provinces without midwifery school or graduates by June 2006 (control)	7.2%	26.1%	18.9 percentage points
Difference (within time period difference by treatment group)	1.7%	13.8%	12.1 percentage points
Proportional difference			64.0%
	Average skilled birth attendance (SBA) use		
	Time 1: before 2006 (before graduating a class)	Time 2: after 2006 (first half) (after graduating a class)	Difference (within group pre-post difference by time period)
Provinces with midwifery school with at least one graduating cohort by 2006 (treatment)	8.0%	22.6%	14.6 percentage points
Provinces without midwifery school or graduates by June 2006 (control)	8.0%	13.5%	5.5 percentage points
Difference (within time period difference by treatment group)	0.0%	9.1%	9.1 percentage points
Proportional difference			62.3%

Source: Jhpiego/Health Services Support Project, Kabul.

The Afghanistan Mortality Survey (AMS) of 2010 shows that over the five preceding years, ANC from a skilled provider had increased from 57 percent in the three to five years before the survey to 68 percent in the year immediately before the survey. This increase was reported for both urban and rural areas (figure 3).

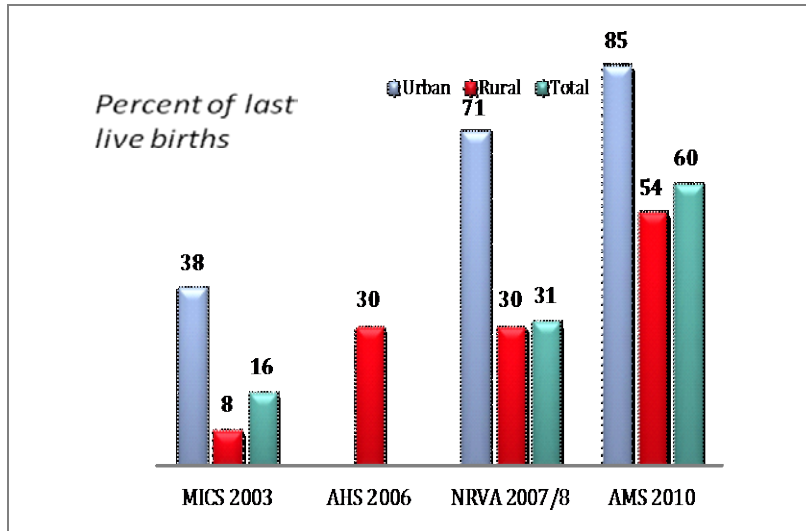
Figure 3: Trends in ANC from a Medically Skilled Provider



Source: Afghanistan Mortality Survey 2010.

A comparison of the AMS 2010 results with the findings from three earlier surveys also shows the sharp gains in use of ANC services (figure 4).

Figure 4: Trends in ANC from a Medically Skilled Provider



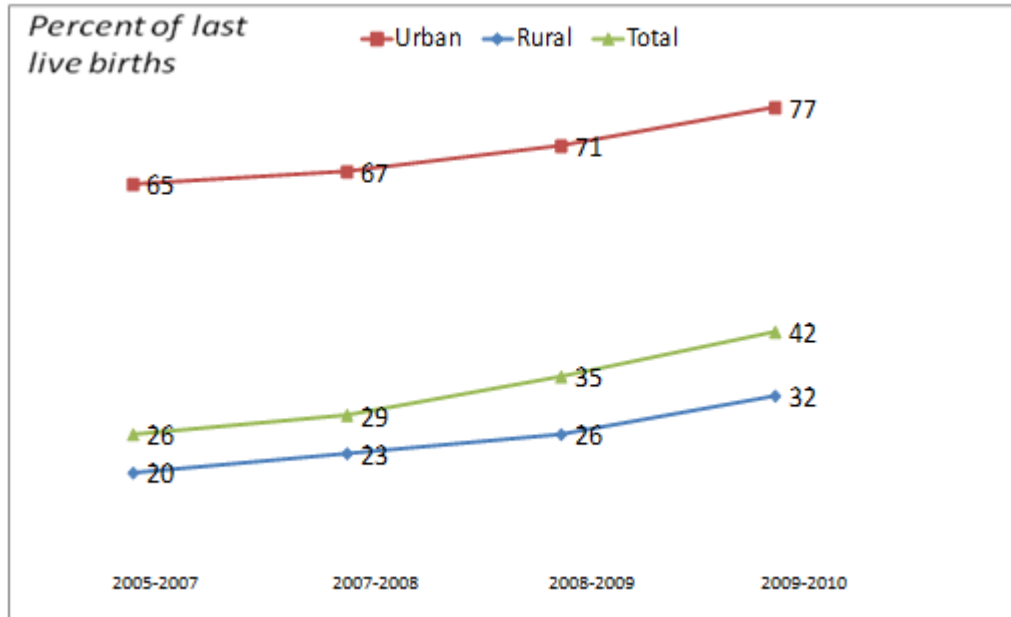
Source: Afghanistan Mortality Survey 2010.

Note: AMS 2010 is based on last live births in the five-year period prior to the survey; NRVA 2007–08 and MICS 2003 are based on last live birth in the two years prior to the survey; AHS 2006 is based on last live birth to currently married women in the two years prior to the survey.

MICS = Multiple Indicator Cluster Survey; AHS = Afghanistan Household Survey; NRVA = National Risk and Vulnerability Assessment; AMS = Afghanistan Mortality Survey.

The capacity of Afghan health facilities to provide delivery care to women has also expanded rapidly: approximately seven in ten health facilities had the capacity to provide delivery care according to BPHS standards in 2008, almost three times the proportion of 2004. The AMS 2010 results indicate a similar steady increase in women attended by SBAs from 26 percent at 36 to 59 months before the AMS to 42 percent in the 12 months before the survey, with gains noted in both urban and rural areas (figure 5).

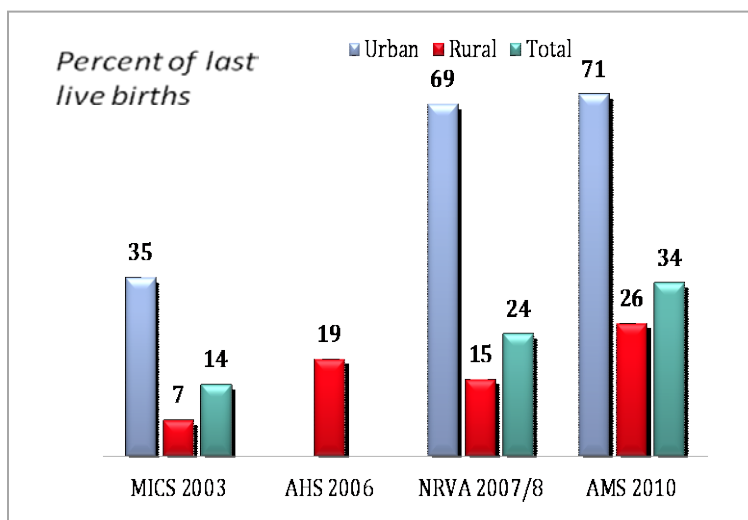
Figure 5: Trends in Delivery Care from a Medically Skilled Provider



Source: Afghanistan Mortality Survey 2010.

As with ANC services, a comparison of AMS 2010 results with those from earlier surveys shows the rapid progress in improving access to delivery care from SBAs (figure 6). The Multiple Indicator Cluster Surveys (MICS) 2003 found that 14 percent of births were attended by SBAs; the National Risk and Vulnerability Assessment (NRVA) Survey 2007–08 found roughly one in four women delivered with an SBA; and the AMS 2010 found that more than one-third (34 percent) of births were assisted by SBAs. The AMS also indicated that doctors assist in the delivery of 16 percent of births, and nurses or midwives in 19 percent of deliveries (Afghanistan, APHI/MoPH 2010).

Figure 6: Trends in Delivery Care from a Medically Skilled Provider

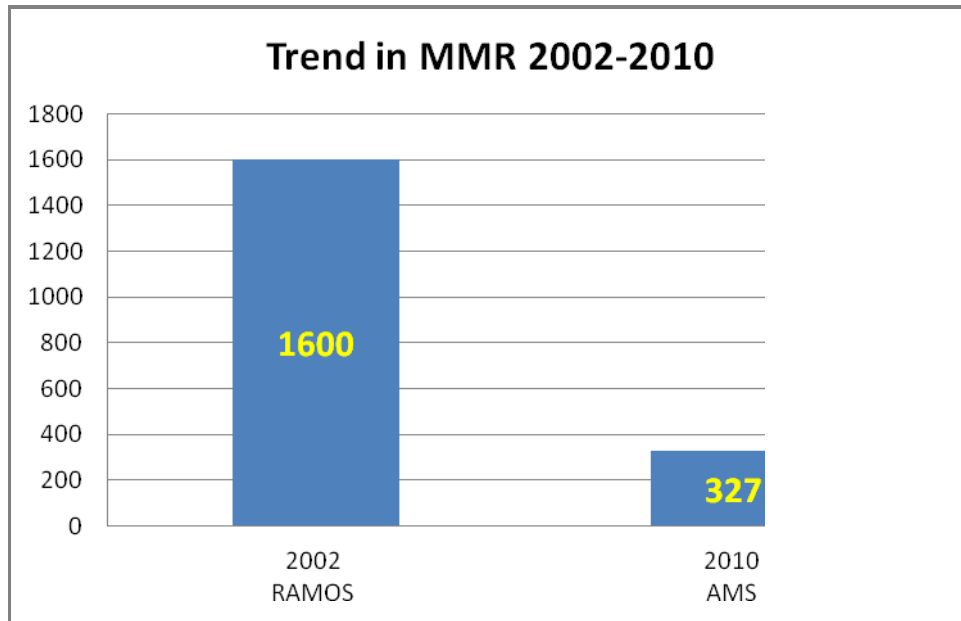


Source: Afghanistan Mortality Survey 2010.

Note: AMS 2010 is based on last live births in five-year period prior to the survey; NRVA 2007–08 and MICS 2003 are based on last live birth in the two years prior to the survey; AHS 2006 is based on last live birth to currently married women in the two years prior to the survey.

The MMR showed a steep fall between 2002 and 2010 (figure 7), consistent with improvements in other maternal health indicators such as ANC from a skilled provider and skilled birth attendance, both of which (as seen) have jumped in recent years (Ibid.).

Figure 7



Source: Afghanistan Mortality Survey 2010
Note: RAMOS = Reproductive Age Mortality Survey

STAKEHOLDERS' PERSPECTIVES ON DIMENSIONS OF THE PROGRAM

The previous sections were data-based; this section offers a closer look at qualitative findings.

All involved parties in the CME Program acknowledge and appreciate the tangible changes and progress in access and utilization of health care and reproductive health services. All believe that the program has been a key to that success. Since their deployment in community clinics and hospitals, midwives have seen a vast increase in the use of general health care by women in the community, with a particular rise in maternal and child health services. Before they arrived, women in remote areas with no other access to female providers sought care from traditional healers, religious leaders, and traditional birth attendants. In communities where midwives have been introduced, women are now much more likely to deliver at the health facility or at home under the supervision of a skilled midwife.

Outreach activities conducted by midwives; good community relations between the midwife and religious leaders, elders, teachers, and other influential figures; and the person-to-person spread of information all contributed to this increased use of health services by community women (Bartlett et al. 2011).

The MoPH and all CME stakeholders consider the CME Program one of MoPH's most successful initiatives to address the needs of rural and remote populations for health services. They view it as one of the most remarkable achievements of the last ten years:

“Since 2002, the expansion of BPHS and the CME Program are the biggest successes” — MoPH leadership, February 2013.

“CME Program must be considered as the most successful initiative of the MoPH because this program was developed keeping in view the needs of the remote and unreachable communities” — an NMEAB member, February 2013.

Key stakeholders are satisfied with the job carried out by the CME Program and graduated midwives. They believe that midwives have played a significant role in reduction of maternal mortality in the country. They appreciate the provision of primary and basic reproductive health services in very remote and isolated areas:

“Investing in midwives was the best option to train the midwives locally and deploy them locally in rural areas” — MoPH leadership, February 2013.

“As we know that during these ten years there has been drastic improvement in the MMR, and Ministry of Public Health recognizes community midwives efforts behind this success” — a member of AMA, March 2013.

The impact of midwives training and deployment on utilization of reproductive health services is well appreciated. Some teachers feel that the program and deployed midwives increase the utilization of reproductive health services, including ANC and postnatal care:

“This is a good program for the community. We reduce the death of mothers and children by this program. This program helps the community in their own village and the community is pleased with this program” — a CME teacher, December 2012.

“The CME Program is a good program. By this program the ANC and PNC [postnatal care] services became better, and by this program a lot of women come to health facilities and get different kind of advices from the midwives” — a CME teacher, December 2012.

Health facility staff who saw the provision of services before midwives were deployed acknowledge and appreciate the work of the new midwives, and believe that their input has changed many things:

“A lot of women come to the health facility because a midwife is hired in our health facility” — a health worker in a BPHS health facility, December 2012.

“I can say that now most of the important work is done by our health facility midwife, and people are very satisfied” — a health worker, December 2012.

“Now about 80 percent of patients are visiting our midwife, few go to doctor, because most of the patients are female” — a health worker, December 2012.

The provincial health directorates directly involved in different stages of the program acknowledge the changes brought about by the program and graduated community midwives. They see that, due to deployment of midwives in health facilities, maternal mortality and morbidity have decreased. They believe that the midwives address the needs of communities for health services:

“The graduated midwives changed a lot of things and addressed a lot of needs. The number of female patients visiting the health facilities increased and the number of mortality cases decreased in our province” — a provincial health director, January 2013.

“After implementation of the CME and training of CME midwives, the maternal morbidity and mortality decreased, professional human resource increased; the number of safe deliveries increased” — a provincial health director, January 2013.

“The community midwives are playing an important role in provision of maternal and child care. They have become one of the reasons for reducing maternal deaths due to pregnancy and pregnancy complications” — a provincial health director, December 2012.

The communities — a prime focus of health service delivery — are satisfied with their decision to introduce one of their local women to be trained and deployed in their own communities. They believe that now that people have easy access to services, more women visit health facilities and use the services, including delivery services:

“After deployment of our midwife, people’s thinking is changed, all mothers are visiting the clinic and the midwife is in their service day and night, during official and unofficial times” — male representative of a health committee, December 2012.

“In the past only rich families could take their expectant mothers to doctors, but now after the midwife came, all people can visit the clinic for delivery and receiving vaccine” — female member of a health committee, December 2012.

“Before the hiring of the community midwife, most of the women had their delivery at home in an unprofessional way, but now as all of the midwives are from our community, the women are going to the clinic for delivery” — male member of a health committee, December 2012.

“After the midwife came to our village clinic, it became easy for us to go to the clinic. Now most of our village women go to clinic for delivery and other women’s health problems. Before, few women would visit the clinic because they did not receive attention” — female member of a health committee, December 2012.

Communities seem to believe that the training and deployment of midwives has helped reduce the shortage of professional human resources in health, especially midwives and

female health workers in rural and remote areas. The MoPH leadership considers the CME Program successful in expeditiously tackling this shortfall. BPHS implementers in different provinces consider the program one of the health sector's major achievements of the past ten years:

“The CME Program was a very good investment to address the shortage of female staff rapidly in a short period of time, which was 18 months. It helped to reduce the shortage of female health workers. For instance in 2002 we had about 400 midwives, while now we have about 3,600 midwives” — MoPH leadership, February 2013.

“In the rural and remote areas where there were no midwives, a big percentage of people did not have access to reproductive health services. Today, we have community midwives, and people have good access to health services” — a BPHS provincial project manager, January, 2013.

“However, now after ten years, country has more than 3,000 midwives and many of them are working in the rural areas and underserved areas of Afghanistan. In the country where there was severe scarcity of female health care providers, now majority of its health facilities are filled with at least one female health care provider, and most of the time it's CME Program graduates who are deployed to these remote health facilities” — a BPHS health program coordinator, January 2013.

The stakeholders consider the accreditation process one of the most important aspects of the program, in that it ensures high-quality preservice midwifery education by setting and evaluating standardized procedures for the program. They also feel that the midwifery accreditation system can be a model for other upcoming education accreditation systems in the country:

“Another important part of the program is accreditation of the program by third party, and assessment and evaluation of the standards” — MoPH leadership, February 2013.

“I can tell you, in some cases they (community midwives) are doing better than specialists, because they are trained based on standards and are graduated from an accredited program” — an NMEAB board member, February 2013.

The community midwives' role as change agents is recognized among health stakeholders, including the community. They believe that midwives facilitate behavior change at both family and community levels. They feel that health-seeking behavior is improved and more people, especially women, are visiting health facilities; people's knowledge of health services (notably reproductive health) is improved; attitudes and practices of people have changed; and people are more open to seeking care and using services:

“I think changes happened from the level of household to the level of community. Women are visiting facilities to get services and the community’s perspective is positive on the services provided by midwives in clinic” — a CME school manager, January 2013.

“People’s knowledge in regards to the provision of reproductive health services has improved. People are using the services more” — a provincial reproductive health manager, January 2013.

“I can see that people’s health-seeking attitude and practice has changed, and they are open for receiving services” — a health worker of a BPHS health facility, December 2012.

Trust that emerges from interpersonal relations with health providers is important in motivating people to visit health facilities and use the services. Good interpersonal relations and interaction between providers, clients, and the community establish trust and credibility through demonstration of respect, confidentiality, and responsiveness. A relationship of trust between communities and midwives at health facilities seems to be growing.

“Because the midwife was selected from our village, and now she works for our community, therefore women trust her and visit the clinic” — a member of community health *shura*, December 2012.

“Presence of a midwife in our health facilities has enhanced the trust of the community, therefore the number of patients increased” — head of a district hospital, December 2012.

“The health system at the community level is strengthened; the value of health is improved. The families respect the midwives and trust the services they provide and value their achievements” — a CME trainer, January 2013.

The midwives who graduated from the program have a good understanding of their career and achievements. They are very satisfied with the quality of their education, rating their program, on average, from very good to excellent. They report being able to apply their acquired knowledge and skills to their job settings (Bartlett et al. 2011).

The graduated midwives have observed the changes at health facilities and for health services delivery after they joined the health system. They see themselves as change agents for improved access to and quality of services:

“After I started to work in this health facility, the data for antenatal care, deliveries, and postnatal care improved; night duty became regular and registration improved” — a community midwife in a BPHS facility, December 2012.

“After I started to work in this clinic, the number of deliveries increased; infection prevention improved; and the number of clients visiting the clinic increased” — a community midwife in a BPHS health facility, December 2012.

“Before I joined this clinic, there were only five deliveries per month, and there was no family planning; after I started in this clinic, the number of deliveries reached 35 to 40 per month, and we provide 500 cycles of family planning per month” — a community midwife in a BPHS facility, December 2012.

The midwives seem to be delighted with the respect and trust the community has in them and their services. They are confident in what they do and are happy with the positive interaction they have with the community. Mutual trust between the health service provider and clients leads to complete sharing of information, and better diagnosis and treatment:

“When we participate in an event or we are in a gathering, they give us a special place and attention, and respect us a lot” — a community midwife from a BPHS facility, December 2012.

“The people use our services because they trust us” — a midwife from a BPHS facility, December 2012.

“I am confident about the services we provide; people trust us, that is why the number of people visiting our facility is increasing” — a community midwife from a BPHS facility, December 2012.

The graduated midwives have noticed changes in their personal and social lives. The midwives acquired knowledge and skills in areas such as ANC, postnatal care, safe delivery, birth spacing, newborn care, behavior change communication, and counseling. Moreover, the midwives feel satisfied with their earnings as health service providers:

“The CME Program gave me professional and technical capacity in antenatal, postnatal, and safe deliveries; it changed my personal behavior” — a community midwife, December 2012.

“I am well known by the community, and I earn enough to live on” — a community midwife, December 2012.

The midwives stressed that being selected from and deployed in the same community was a strong element of the program. This advantage makes them familiar with local norms and cultural realities. Thus, the midwives can provide culturally sensitive services appropriately:

“Since I am from this community and know their culture, the people trust me and share their problems” — a community midwife, December 2012.

SUCCESS STORIES

During meetings, representatives of communities, health facilities, and other stakeholders offered many examples of success. Some of their stories are quoted.

A story by a community midwife in Maidan-Wardak province shows her efforts to save women's lives.

“One winter In the middle of the night around one o'clock, where the village was surrounded by international force, our door was knocked at by someone. My husband opened the door to an anxious and terrified man who asked for help. His wife was expecting a baby. I took my instruments and tools and left our home along with my husband. We were searched by the army people, and after a lot of trouble, we got to the man's house. I could help the woman until the delivery was completed; both mother and baby were safe. The woman and her husband thanked us and said what would they have done if I were not there. I was also happy for helping her” — a community midwife in Maidan-Wardak province, December 2012.

A story reported by a community midwife in Kunduz province indicates the dedication of midwives toward their profession and their people.

“A midwife from Gultapa clinic received a pregnant woman who had severe bleeding and needed a referral to the provincial hospital. This happened in a time that the main road from the district to the provincial capital was blocked due to an ongoing battle between the international forces and government opposition. The midwife took the preliminary measures and accompanied the patient to get to the hospital from indirect roads with a lot of trouble. The mother delivered on the way to hospital. The midwife could help the mother and the baby and get them to the hospital safely” — January 2013.

Sometimes midwives find themselves in urgent situations when they must decide and take action. A midwife from Baharak district of Badakhshan shared the following story:

“One night a patient was brought to our clinic to give birth. She had severe bleeding and needed referral. We decided to refer her, but she did not agree. We had to start working on her. Finally the delivery took place, and the mother and child were safe. It made me stronger and gave me power to work” — December 2012.

A midwife from Takhar province shared a story about her life-saving efforts:

“A patient with serious bleeding was brought to our clinic. Her family Had despaired about her about her and thought she would not survive. We started to act quickly. We applied measures to control shock and bleeding. We managed to stabilize her and saved her life. This really made me and her family happy” — December 2012.

SUSTAINABILITY AND SCALING-UP

Sustainability is not just about funding. It is also about creating and building momentum to maintain community-wide changes by organizing and maximizing community assets. Sustainability means institutionalizing policies and practices within communities and organizations (CDC 2011).

The CME Program — through selecting women from local communities, providing training, and deploying them back to their communities — sustains impact. Trained midwives are community resources who can have long-lasting and sustainable impact through their services to the community.

MoPH and donor agencies are making comprehensive efforts to sustain the program. According to MoPH, there are currently more than 3,000 midwives, and MoPH has foreseen the need to train about 7,000 to 8,000 more. One important step toward continuing the program is integrating it with the new round of the BPHS under System Enhancement for Health Action in Transition (SEHAT) project with a pledge of three-to-five years' donor funding. This new round of BPHS will start in January 2014.

MoPH considers the program a successful intervention with great potential for replication to tackle the shortage of other health professionals. According to MoPH, it has already started Community Health Nursing Education (CHNE), which is built on lessons learned from the CME Program.

CHNE will continue to recruit female candidates from remote areas of districts, where they will be subsequently posted (they are assigned to health facilities near their homes). This new initiative will further increase the utilization of health services among women and children. According to MoPH, the CHNE program is currently implemented in four provinces; by the end of 2013, it will be expanded to another eight to ten provinces.

Likewise, MoPH will explore options to use the CME model for training other health professionals, such as laboratory technicians and physiotherapists.

V. CHALLENGES

One of the frequently reported challenges of the CME Program is selection of students. Improper selection will jeopardize the later stages, including training, deployment, and retention. Contributing factors in improper student selection include influence and force wielded by local potentates and unavailability of eligible students in the targeted community.

National admission criteria in the CME national policy do not apply to some remote areas. In some instances, if eligible students are unavailable, the selection committee finds candidates from neighboring districts to meet the criteria, creating in these instances, consequences for deployment and retention.

Deployment and retention at the original site are also challenges due partly to improper selection, and partly to other reasons including intervention of local power leaders and other influential people, family problems, marriage, and insecurity.

Accreditation of CME schools in insecure provinces is sometimes challenging, especially in those provinces with no flight facilities. Due to insecurity, program assessors cannot travel to some provinces, thus delaying accreditation.

Post-deployment supportive supervision and follow-up of graduates in BPHS facilities is weak, especially when midwives are deployed in remote areas without sufficient technical supervision.

Security remains a big challenge for deployment and retention in some remote areas. Due to insecure working conditions, families do not allow midwives to work. In some areas midwives cannot move around freely to do their job.

VI. RECOMMENDATIONS

The review of the CME Program makes the following recommendations to the MoPH, donor agencies, and stakeholders, including communities:

- MoPH and donors should ensure that the program is continued and expanded.
- Donors should continue their financial support to train enough community midwives for public and private sector health facilities.
- MoPH, Provincial Public Health Department (PPHD), and implementing partners should ensure proper selection (with appropriate qualifications, for the right areas, and with genuine commitment to serve their communities).
- PPHD and implementing partners should ensure that program standards are implemented in the selection and training phase to improve retention.
- The selection process should be strengthened, and external factors that influence the process controlled through close coordination and cooperation between PPHD, implementing partners, and the community.
- MoPH should note that revision is needed in eligibility criteria for student recruitment as retention and deployment issues usually revolve around these. They should be flexible for some exceptional circumstances, especially in areas with greater mother and child health problems.
- To implement the CME Program, strong support of the community and other sectors is needed. Some of the provinces need midwives but do not have educated and literate women to join the program.
- MoPH should explore other education opportunities in coordination with the Ministry of Education to enable midwives to complete their 12 classes while they work at the health facilities.
- The capacity of NMEAB should be further developed, and the number of board assessors should be increased. Moreover, midwives' and nurses' role in NMEAB in leading positions and as members should be improved.
- NMEAB should note that the accreditation standards must be regularly reviewed and updated.
- Post-deployment supervision of midwives should be strengthened in coordination with PPHD and BPHS implementing partners.
- Post-graduation follow-up and tracking mechanisms for midwives within the MoPH human resource information system should be initiated and maintained.
- MoPH should provide opportunity for midwives to obtain higher levels of education, including bachelor's and master's degrees.
- PPHD and implementing partners should strengthen continuous in-service training for graduated midwives.
- MoPH should ensure involvement of midwives in the policy-making process at the central MoPH level so that they can advocate for themselves.
- MoPH, NMEAB, and AMA with other stakeholders should expedite the process of establishing the midwifery and nursing council.
- MoPH, AMA, and other key stakeholders should develop mechanisms to work with communities, politicians, and policy makers to raise awareness about the role

and contribution of community midwives as core resources for achieving health targets in Afghanistan.

- MoPH should develop innovative strategies and policies for equitable, gender-sensitive working conditions, such as schooling for children, housing arrangements, and job opportunities for unemployed husbands.

VII. REFERENCES

- Afghanistan, APhi/MoPH (Afghan Public Health Institute, Ministry of Public Health). 2010. *Afghanistan Mortality Survey*. Kabul.
- Afghanistan, Institute of Health Sciences. 2009. *Curriculum for Community Midwifery Education*, 3rd edition. Kabul.
- Afghanistan, Ministry of Public Health. 2002. *Afghanistan National Health Resources Assessment Final Report: Management Sciences for Health* (December). Kabul. http://www.msh.org/afghanistan/ANHRA_2002_LITE.pdf. Accessed December 7, 2012.
- Afghanistan, MoPH (Ministry of Public Health). 2003. *A Basic Package of Health Services for Afghanistan (BPHS)*. Kabul.
- . 2006. *Human Resource Policy*. Kabul.
- . 2009. “National Policy on Midwifery Education and the Accreditation of Midwifery Education Programs in Afghanistan.” Kabul.
- Bartlett, L., A. LeFevre, H. Gibson, J. Rahmanzai, K. Viswanathan, K. Yari, L. Steinhardt, M. Azimy, N. Ansari, N. Assefi, P. Manalai, P. Azfar, R. Callaghan, and S. Turkmani. 2011. *Evaluation of the Pre-Service Midwifery Education Program in Afghanistan*. Kabul: Jhpiego/ Health Services Support Project.
- Bartlett L., S. Mawji, S. Whitehead, C. Crouse, S. Dalil, D. Lonete, and P. Salama. 2005. “Where Giving Birth Is a Forecast of Death: Maternal Mortality in Four Districts of Afghanistan, 1999–2002.” *The Lancet* 365 (9462): 864–70.
- Bogren, M. U., A. Wiseman, and M. Berg. 2012. “Midwifery Education, Regulation and Association in Six South Asian Countries — A Descriptive Report.” *Sexual and Reproductive Healthcare Journal* 3 (2): 67–72.
- Braithwaite, J., D. Greenfield, J. Westbrook, Marjorie Pawsey, Mary Westbrook, Robert Gibberd, Justine Naylor, Sally Nathan, Maureen Robinson, Bill Runciman, Margaret Jackson, Joanne Travaglia, Brian Johnston, Desmond Yen, Heather McDonald, Lena Low, Sally Redman, Betty Johnson, Angus Corbett, Darlene Hennessy, John Clark, Judie Lancaster. 2010. “Health Service Accreditation as a Predictor of Clinical and Organisational Performance: A Blinded, Random, Stratified Study.” *Quality and Safety in Health Care* 19 (1): 14–21. doi:10.1136/qshc.2009.033928.
- Braithwaite, J., C. D. Shaw, M. Moldovan, D. Greenfield, R. Hinchcliff, V. Mumford, M. B. Kristensen, J. Westbrook, W. Nicklin, T. Fortune, and S. Whittaker. 2012. “Comparison of Health Service Accreditation Programs in Low- and Middle-Income Countries with Those in Higher-Income Countries: A Cross-Sectional Study.” *International Journal for Quality in Health Care* 24 (6): 568–77.
- Buor, D., and K. Bream. 2004. “An Analysis of the Determinants of Maternal Mortality in Sub-Saharan Africa.” *Journal of Women’s Health* 8 (October): 926–38.
- CDC (Centers for Disease Control and Prevention). 2011. *A Sustainability Planning Guide for Healthy Communities*. http://www.cdc.gov/healthycommunitiesprogram/pdf/sustainability_guide.pdf. Accessed March 3, 2013.
- Chaudhury, R. H. 2008. “Multi-Sectoral Determinants of Maternal Mortality in Bangladesh. *United Nations Economic and Social Commission for Asia and the Pacific*.” Hefei,

- Anhui Province, China, October 20–22, p. 1–3.
www.unescap.org/esid/psis/meetings/MMR/Bangladesh.pdf. Accessed December 15, 2012.
- Chowdhury, M. E., R. Botlero, M. Koblinsky, S. K. Saha, G. Dieltiens, and C. Ronsmans. 2007. “Determinants of Reduction in Maternal Mortality in Matlab, Bangladesh: A 30-Year Cohort Study.” *The Lancet*. 370 (October): 1320–28.
- CSO (Central Statistics Organization). 2009. *Settled Population by Civil Division, Urban and Rural and Sex 2008–09. Afghanistan*.
- Currie, S., P. Azfar, and R. C. Fowler. 2007. “A Bold New Beginning for Midwifery in Afghanistan.” *Midwifery* 23 (3): 226–34.
- De Bernis, L., D. R. Sheratt, C. AbouZahr, and W. Van Lerberghe. 2003. “Skilled Attendants for Pregnancy, Childbirth and Postnatal Care.” *British Medical Bulletin* 67: 39–57.
- Family Care International. 2002. *Skilled Care during Childbirth: Country Profiles*. New York: Family Care International.
- Fauveau, V. S., Della R. Sheratt, and Luc De Bernis. 2008. “Human Resources for Maternal Health: Multi-Purpose or Specialists?” *Human Resources for Health* 6 (September): 21.
- Islam, M., and S. Yoshida. 2009. “Women Are Still Deprived of Access to Lifesaving Essential and Emergency Obstetric Care.” *International Journal of Gynecology and Obstetrics* 106: 120–24. doi:10.1016/j.ijgo.2009.03.022.
- Afghanistan. 2010. *Afghanistan Millennium Development Goals Report*.
<http://www.undp.org/content/dam/afghanistan/docs/mdg/MDG-2010-Report-Final.pdf> .
 Accessed December 7, 2012.
- Khan, K. S., D. Wojdyla, L. Say, A. M. Gülmezoglu, and P. F. Van Look. 2006. “WHO Analysis of Causes of Maternal Death: A Systematic Review.” *The Lancet* 367 (9516): 1066–74.
- Loevinsohn, B., and G. D. Sayed. 2008. “Lessons from the Health Sector in Afghanistan: How Progress Can Be Made in Challenging Circumstances.” *The Journal of the American Medical Association* 300 (6): 724–26. doi:10.1001/jama.300.6.724.
- Mansoor, G. F., P. S. Hill, and P. Barss. 2012. “Midwifery Training in Post-Conflict Afghanistan: Tensions between Educational Standards and Rural Community Needs.” *Health Policy and Planning* 27 (1): 60–68. doi:10.1093/heapol/czr005.
- Prata, N., M. Graff, A. Graves, and M. Potts. 2009. “Avoidable Maternal Deaths: Three Ways to Help Now.” *Bangladesh Global Public Health* 4 (6): 575–87. doi: 10.1080/17441690802184894.
- Save the Children. 2010. *Women of the Front Lines of Health Care, State of the World’s Mothers 2010*. London: Save the Children. <http://www.savethechildren.org/atf/cf/%7B9def2ebe-10ae-432c-9bd0-df91d2eba74a%7D/SOWM-2010-Women-on-the-Front-Lines-of-Health-Care.pdf?msource=weefuchc0711>. Accessed January 20, 2013.
- . 2011. *Missing Midwives*. London: Save the Children Fund.
<http://www.savethechildren.org.uk/resources/online-library/missing-midwives>. Accessed January 9, 2013.
- Smith, J. M., S. Currie, P. Azfar, and A. J. Rahmanzai. 2008. “Establishment of an Accreditation System for Midwifery Education in Afghanistan: Maintaining Quality during National Expansion.” *Public Health* 122 (6): 558–67.

- Todd, C. S., G. F. Mansoor, M. Wood, F. Gohar, S. Mir, and P. Hashimy. 2012. "Evaluation of Midwifery Retention in Afghanistan." HPRO-MSH. January 19. Unpublished.
- UNFPA. 2003. *Afghanistan Reproductive Health Resources Assessment*. Prepared for the United Nations Population Fund. March.
http://www.hands.or.jp/pagesj/08_publicity_pdf/Afghan_RH.pdf. Accessed December 7, 2012.
- . 2006. "Scaling Up the Capacity of Midwives to Reduce the Maternal Mortality and Morbidity." Workshop report, New York, March 21–23 .
- UNICEF. Maternal and Newborn Health. 2012.(Internet).
http://www.unicef.org/health/index_maternalhealth.html. Accessed January 29, 2013.
- UNICEF, WHO, and UNFPA. 1997. *Guidelines for Monitoring the Availability and Use of Obstetric Services*. Geneva: WHO.
http://www.childinfo.org/files/maternal_mortality_finalgui.pdf. Accessed December 11, 2012.
- Waldman, R., L. Strong, and A. Wali. 2006. "Afghanistan's Health System Since 2001: Condition Improved, Prognosis Cautiously Optimistic." Briefing Paper Series, Afghanistan Research and Evaluation Unit, December.
<http://www.areu.org.af/Uploads/EditionPdfs/635E-fghanistans%20Health%20System%20BP%202006%20web.pdf>. Accessed January 7, 2013.
- Walsh, D. 2007. "Afghanistan's Midwives Tackle Maternal and Infant Health." *The Lancet* 370 (9595): 1299. doi:10.1016/S0140-6736(07)61558-X.
- WHO (World Health Organization). 2004. *Critical Role of Skilled Attendants*. A Joint Statement by WHO, ICM, FIGO, Geneva.
- . 2010. *Trends in Maternal Mortality: 1990 to 2008*. Geneva.
- . 2013. "A Human Rights-Based Approach to Health."
www.who.int/hhr/news/hrba_to_health2.pdf. Accessed February 19, 2013.

ANNEX

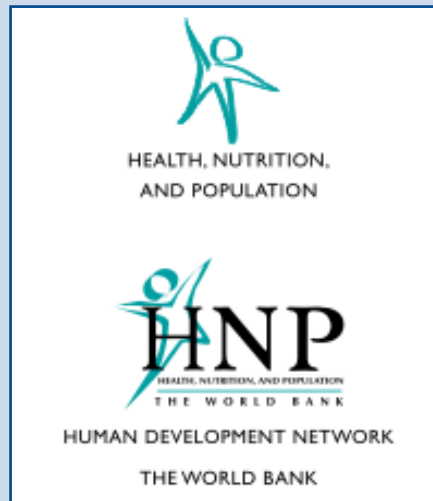
List of consultations at central level

Individual	Organization	Position
Dr. Ahmad Jan Naim	Ministry of Public Health (MoPH)	Deputy Minister of Policy and Planning
Dr. Qadir	MoPH	General Director of Policy and Planning
Dr. Tawfiq Mashal	MoPH	General Director of Preventive Medicine
Dr. Ihsanullah Shahir	MoPH	Director of Human Resource
Dr. Bashir Ahmad Hamid	MoPH	Director of Public Nutrition
Dr. Sadia Fayeque Ayoubi	MoPH	Director of Reproductive Health
Dr. Kimia Azizi	MoPH	Director, Ghazanfer Institute of Health Science (GIHS), Chair of NMEAB
Pashtoon Azfar	International Confederation of Midwives (ICM)	The Asia Regional Midwife Advisor for ICM
Dr. Sefatullah Habib	EU Delegation	Health Program Manager
Dr. Ahmadullah Molakhail	UNFPA	Program Coordinator Sub-national Program
Sabera Turkmani	Afghanistan Midwives Association (AMA)	President
Dr. Javed Rahmanzai	NMEAB	Member
Dr. Murid Haidari	Ministry of Public Health	Advisor, GIHS
Dr. Toor Khan Shirzad	Norwegian Afghanistan Committee (NAC)	Health Manager NMEAB member
Dr. Khalid Ahmad Rahim	Afghan Social Marketing Organization (ASMO)	Program Director
Dr. Abdul Majeed Siddiqi	HealthNet-TPO	Head of Mission
Dr. Ashrafuddin Aini	Agency for Assistance and Development of Afghanistan (AADA)	General Director
Dr. Nazir Rasuli	Care of Afghan Families (CAF)	Senior Advisor
Mr. Mustafa Karim	MERLIN, Afghanistan	Country Director

Individual	Organization	Position
Dr. Shafiq Mirzazada	Agha Khan Health Services (AKHS)	Country Director

List of consultations at provincial level

Individual/ institution	Province	Position
Dr. Hafiz Safi	Takhar	Provincial Public Health Director
Dr. Faridon	Jawzjan	Provincial Public Health Director
Dr. Khan Agha Miakhail	Urozgan	Provincial Public Health Director
Dr. Mohammad Nabi Azim	Kunduz	Head of Primary Health Care
Dr. Shams Samadi	Kunduz	Acting Provincial Coordinator Merlin
Dr. Sayed Mazari Nasserri	Badakhshan	Head of WHO office in Badakhshan
Dr. Farid	Badakhshan	Technical Manager CAF
Dr. Farzana Fani	Badakhshan	Head of Reproductive Health Department
Mrs. Siram Jan	Badakhshan	Head of Badakhshan Midwifery School
Dr. Muyasar	Jawzjan	CME Coordinator
Dr. Karimmullah Zia	Takhar	Technical Manager SHDP



About this series...

This series is produced by the Health, Nutrition, and Population Family (HNP) of the World Bank's Human Development Network. The papers in this series aim to provide a vehicle for publishing preliminary and unpolished results on HNP topics to encourage discussion and debate. The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s) and should not be attributed in any manner to the World Bank, to its affiliated organizations or to members of its Board of Executive Directors or the countries they represent. Citation and the use of material presented in this series should take into account this provisional character. For free copies of papers in this series please contact the individual authors whose name appears on the paper.

Enquiries about the series and submissions should be made directly to the Editor Martin Lutalo (mlutalo@worldbank.org) or HNP Advisory Service (healthpop@worldbank.org, tel 202 473-2256, fax 202 522-3234). For more information, see also www.worldbank.org/hnppublications.



THE WORLD BANK

1818 H Street, NW
Washington, DC USA 20433
Telephone: 202 473 1000
Facsimile: 202 477 6391
Internet: www.worldbank.org
E-mail: feedback@worldbank.org