THE STATE OF THE WORLD'S MIDWIFERY
2011

Midwifery in Bangladesh

In-depth country analysis

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Midwifery in Bangladesh: In-depth country analysis

1. General data

1.1 Introduction

Although its fertility rate has decreased considerably over the past 20 years, Bangladesh still remains the seventh most populated country in the world. The population growth rate is now under control, below 1.5 percent per year, with 56 percent of eligible couples using contraception.[1]

The present government came to power in January 2009, and it was a smooth political transition. Bangladesh has a national target of reaching the status of 'middle-income country' status by 2021.[2] The GNI PPP per capita was US$ 1,440 in 2008. Although its administrative services have been slow to improve, the country has significantly modernized its communications systems, increased literacy rates and strengthened its financial independence through improved agricultural productivity, a flourishing private sector, and remittances from emigrant workers.

1.2 General indicators

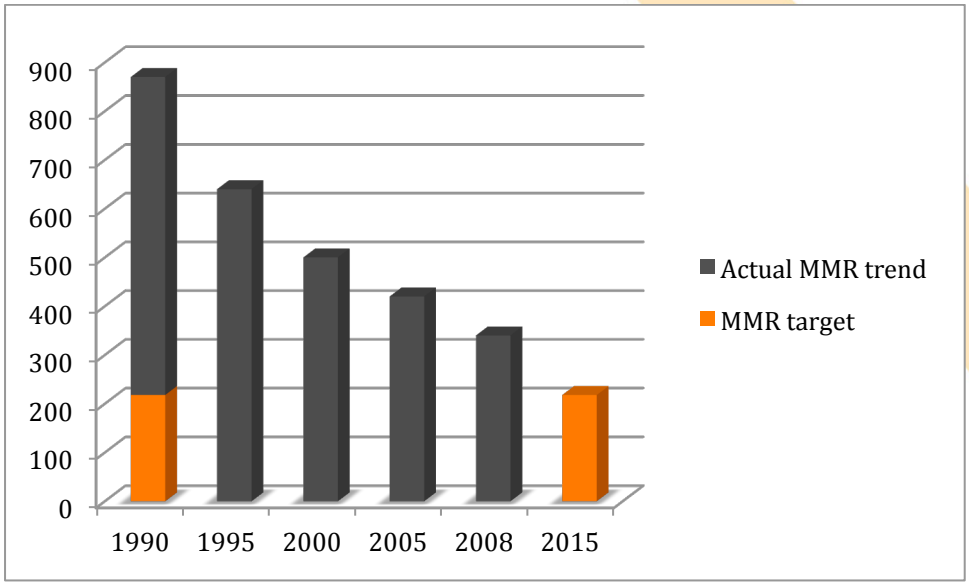
Demographic and health highlights	
Population 2010	164,400,000
Average population growth rate (2005 -2010, %)	1.5
Projected population, 2025	195,000,000
Projected population, 2050	222,500,000
Infant deaths per 1,000 live births	41
Total fertility rate (TFR) (2010)	2.25
Population age <15 (%)	32
Population age 65+ (%)	4
Urban population (%) (2010)	28
Ever-married females ages 15-19 (%)	48
Family planning / Indicators related to women	
Contraceptive prevalence, all methods (%)	56
Women ages 20-24 giving birth by age 18 (%)	46
Births per 1,000 women ages 15-19	72
Unmet need for family planning (%)	11
Births attended by skilled personnel (%)	18
Births attended by skilled health personnel, urban (%)	37
Births attended by skilled health personnel, rural (%)	13
Maternal deaths per 100,000 live births, 2008	340
% illiteracy, ages >15, 2010, female /male (%)	50.2 / 40.0
Secondary school enrolment, female/male, 2000/2004 (as % of school-age enrolment)	50 / 45

Sources for statistics: UNFPA (State of the World Population 2010), Population Reference Bureau,[3] 2010 World Population Data Sheet.[4] National data, from DHS and national surveys, are specified along the text.

1.3 Maternal mortality ratio (MMR) over time, with MDG 5 target

According to the UN data, the MDG 5 for Bangladesh targets a reduction in maternal mortality ratio from 830 in 1990 to 207 by the year 2015. Between 2001 and 2010, the MMR declined by 40 percent.[5] The recent Bangladesh Maternal Mortality Survey (2010) indicated a MMR of 194 per 100,000 live births. The two main causes of maternal deaths in 2001,[6] haemorrhage (29 percent) and eclampsia (24 percent), both requiring the presence of a medically trained provider, registered a reduction by 35 percent and 50 percent respectively in 2010. Underlining this progress might be a greater use of facilities[7] for delivery and management of complications.[8]

Figure 1. The MMR trend, with the MDG 5 target established at one quarter of the 1990 level.



Data from the 2008 estimates of maternal mortality by H4: 1990 to 2008 (2010)

The changes registered in women's behavioural approach to the place of birth are thought to come from:[9]

1. Better access to health programmes by improved availability of health centres: in 2001 only three Upazila Heath Centres offered comprehensive emergency obstetric care (CEmOC), in 2010 their number increased to 132.
2. Higher education levels for women, leading to improved awareness
3. Better economic conditions
4. Better communication systems

1.4 Skilled birth attendance

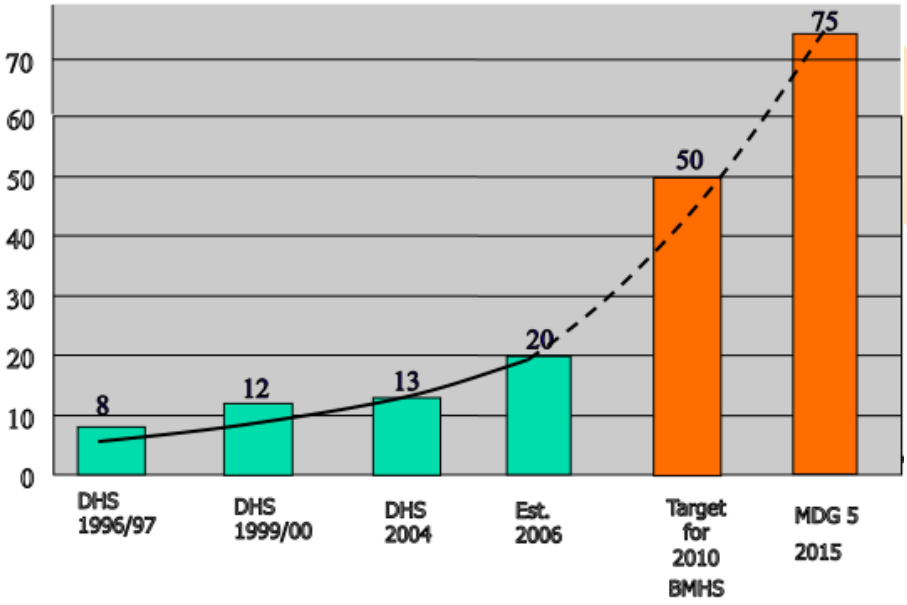
The proportion of deliveries with a skilled birth attendant (SBA) is an indicator for progress monitoring in the achievement of MDG5. Bangladesh's public health system struggled for many years to have the capacity to refer complicated cases to hospital for often life-saving emergency obstetric care (EmOC). From 1993 to 1997 the importance of EmOC gained support from "professional bodies, women's rights activists, development partners and key policy makers. During this period the UNFPA, UNICEF, WHO, DFID, the European Union

and other development partners supported government projects to establish EmOC services" in the country.[10]

The government's target established in 2006 at 50 percent SBA coverage for 2010 has not been achieved, as only 18 percent and 26.5 percent of births were assisted by a medically trained provider in 2008 and 2010, respectively (Figure 2).[11,12,13] In this context, it is worthwhile to mention that achieving an increase in coverage of births by SBAs requires a greater reservoir of educated girls, the implementation of a home-birth with SBA strategy, and an increased use of antenatal care.

Besides skilled birth attendants, trained traditional birth attendants (TBAs) assist 11 percent of deliveries but the majority of women still prefer *dais* or untrained traditional birth attendants (60 percent). Relatives, friends, or neighbours assist six percent of deliveries.

Figure 2. Skilled birth attendance: trends and targets[14]



Births assisted by midwifery personnel are more common:[15]

- In urban areas (37 percent)
- Among women having their first birth (28 percent)
- Among women who have completed secondary or higher education (47 percent)
- Among women from the highest wealth quintile (51 percent).

2. History of midwifery

2.1 Historical heritage, first midwifery training

The colonial heritage is British, modelled on the Indian system. In 1973-74 there were 856 registered midwives, of whom 523 were nurse-midwives, Lady Health Visitors and Lady Family Planning Health Visitors for a population of 78 million.[16]

No registration was required for midwifery practice, but the Nurses, Midwives and Health Visitors Council had regulations covering midwifery services.

In 1974 the country had 15 midwifery training schools capable of preparing 240 midwives. Midwives (non-nurse-midwives) had an 18-month course of training and were required to have eight years of schooling. The nurse-midwives course took one year. In hospitals midwives conducted normal deliveries, while complications were dealt with by doctors. Midwives were allowed to administer drugs only on a doctor's order.[17] Later on in the 1970s, the specific denomination of midwives disappeared as a separate profession and was replaced by nurse-midwives.

2.2 Evolution of the framework for midwifery services

In 1987, the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) initiated a community-based maternity care programme in one half of the service area covering 48,000 people living in 39 villages. Two nurse-midwives (government-trained) were recruited and assigned to each sub-centre in the programme area to conduct home deliveries, anticipate complications and refer them to the district hospital. The experience proved successful.[18] In 1996, the strategy for providing maternity care services in the ICDDR,B service area began to shift from home-based to facility-based delivery of services. Community-based midwives and paramedics were withdrawn from the field and assigned to health sub-centres to conduct normal deliveries.[19]

Maternal health services in Bangladesh are delivered through both community-based and facility-based approaches. Initiated in 1978, the community-based approach was meant to reach the goal 'Health for All by the Year 2000'. The facility-based approach gained momentum in 1987, after the introduction of the Safe Motherhood Initiative.[20]

3. Midwifery and the health system

3.1 Who provides midwifery services (midwives, nurse-midwives, SBAs, TBAs)

Although Government health facilities are available down to union level, existing cultural beliefs and social practices mean 90 percent deliveries happen at home.[21] Traditional birth attendants (TBAs), numbering about 53,000[22] assist in three quarters of births in Bangladesh; of these, 12 percent are assisted by trained and 64 percent by untrained TBAs.[23] Medically trained cadres (doctors, nurses/midwives/family welfare visitors/other medical assistants) assist only 13 percent of the deliveries, as compared to 60-80 percent in many developed countries.[24,25] Delivery assistance provided by doctors and/or trained medical professionals is substantially higher in the case of lower-order births, mothers with secondary education, wealthy households and those with four or more antenatal care visits.[26]

Health cadres providing midwifery services include:[27]

- General practitioners (number N/A)
- Obstetricians-gynaecologists (1,250)
- Registered nurse-midwives (26,899)
- Community skilled births attendants (6,167).

Registered nurse-midwives

The severe shortage of nurses in Bangladesh prevents existing registered nurse-midwives from being fully utilized for midwifery services. There is, however, increasing attention to enhance their contribution for maternal and newborn health services in order to address the issues of high maternal mortality ratio and low percentage of births attended by skilled attendants in Bangladesh.[28]

Mainly working as hospital staff nurses filling vacancies and frequently rotating throughout the hospital, registered nurse-midwives have little or no specialized in-service training.[29] All nurse-midwives work in the maternity unit on rotational basis.[30] Multi-tasked, it is difficult for them to develop clinical expertise in any specialty areas including midwifery. In addition, specific job designs or job descriptions for midwifery services are lacking for registered nurse-midwives.[31]

Registered nurse-midwives are under the management and supervision of the Directorate of Nursing Service (DNS). Their main working place is at tertiary level hospitals or medical college hospitals, district hospital; only a few are working at Upazilla hospitals, where they are not fully utilized as midwives.[32]

Family welfare visitors

Many of the family welfare visitors are now at retirement age and there is an overall shortage of this category at Family Welfare Centres at the union level and at the Upazila Health Complexes at the Upazila level. The possibility that more educated professionals like the registered nurse-midwives could effectively carry out the functions of these family welfare visitors has been proposed.[33]

Community-based skilled birth attendants

To provide a skilled care for pregnant women and mothers who deliver at the community level, in 2004 the Government of Bangladesh began investing in training community-based skilled birth attendants (SBAs). Together with the family welfare visitors, they are the main providers of midwifery services at domiciliary and union level.[34]

The community-based SBA programme has been continuously improved. However, recent findings indicate that community-based SBAs are not able to provide adequate first aid for referral of obstetric complications. This led to the introduction by the Government of an additional three-month training course, which was implemented initially in selected districts. The community-based SBAs were supposed to collaborate closely with the existing traditional birth attendants (TBAs) in the community. Networking of community-based SBAs with facilities providing basic and comprehensive EmOC was needed for referral back up to community-based SBAs.[35] The community-based SBAs refer high-risk pregnancies and deliveries to the Upazila Health Complex or directly to the district hospital or to a Family Welfare Centre, depending on the availability of EmONC services.[36]

The strategy requested community-based SBAs to be supervised by family welfare visitors, however this supervision is currently insufficient due to shortage of family welfare visitors.

Family welfare assistants (FWAs) and health assistants (HAs)[37]

FWAs and HAs are the field-level personnel of the public sector. The HA offer preventive health care services and FWAs supply condoms and contraceptive pills during home visits. Recently some female HAs and FWAs have been trained as community-based SBAs.[38]

A 1975 national policy for population control led to the employment of thousands of full-time female FWAs in the Family Planning wing of the MoHFW. Integration of maternal and child health care with family planning has been specified in the national health strategies since 1975.

The FWAs were instructed to provide antenatal care and refer high-risk pregnancies, alongside their family-planning tasks, although the two wings of the Ministry — Health Services and Family Planning remained separate. However, as targets for the performance of FWAs focused on family planning, the FWAs worked primarily as family planning agents.[39]

Their number increased to 23,500 in 1989 to allow frequent household visits and distribution of family-planning methods in a catchment area of 4,000 people. Even today, the pre-service training of FWAs, family welfare visitors and female HAs does not include midwifery skills, but rather focuses on family planning and basic curative care.[40]

Registered midwife

As per the shortage of nurse-midwives in Bangladesh, a long-term human resource plan supports the idea of fully qualified midwives (3-4 years training after 12 years general education) to provide quality midwifery services and a strong supervisory body for the community-based workers.

The Obstetrical and Gynecological Society of Bangladesh (OGSB) had proposed in 2007 a short-term solution for training of existing nurse-midwives in a 6-month midwifery training

programme for hospital midwifery services together with a long-term solution for pre-service education of a new cadre of midwives.[41]

- The short-term solution has been implemented starting in 2010. After an intensive course of 6-months according to the international standards, the first 60 midwives of the country received their diplomas on the occasion of the 2011 International Day of the Midwife, 5 May 2011.[42]

- The long-term solution is a new type of skilled personnel with less years of training than registered nurse-midwives was proposed as an interim measure.[43] As per international standards, this new cadre was proposed to be educated in 2-year pre-service nursing and midwifery training/education, and be licensed to practice as a "registered midwife". The possibility of continuing education to the level of a registered nurse-midwife has been also proposed.[44] The direct-entry programme for midwifery studies is scheduled to start in 2012, after the completion of the curriculum.[45]

3.2 Practices and beliefs — what is the place of TBAs and SBAs? How people deal with pregnancy and birth

Despite the availability of health facilities, a large majority of women prefer to give birth home and with TBAs. The review of performance of trained TBAs showed that they continued several harmful birth practices such as performing unhygienic and unnecessary vaginal examination, applying pressure on the abdomen, tying over the abdomen tightly, asking the woman to push prematurely, etc. It is in recognition of these factors that the Government created community-based SBAs.[46]

However, one of the biggest challenges of the Government is to convince women to use the available health facilities. Women's status is still low, with Bangladesh ranking 105 (out of 146 countries) according to the UNDO gender-related development index.[47] Fathers are usually not present in the delivery room, the supportive role being played by their mothers or other senior women in the family. There is a current move to change this attitude, hoping that men "would be more likely to send their pregnant wives to proper medical facilities and less likely to insist on early childbirth after marriage".[48]

3.3 Public awareness and perceptions about the profession

The profession of midwife is relatively unknown to the public, as for the moment there is no separate cadre doing midwifery. More advocacy and public awareness is needed to build public confidence in a midwifery cadre. The midwifery society advocacy together with the development of a new midwifery cadre are proves for a future change in public perception.[49]

3.4 How is midwifery addressed within the national maternal, newborn and child health plan and programme?

Policies and a plan regarding maternal health are in place, however the plan is not costed and no projections have been done for the future workforce.[50]

In 1997, the Government of Bangladesh launched the Safe Motherhood Initiative, a call for actions and commitment of resources to address maternal mortality. In 2000, the government committed itself to the Millennium Development Goals (MDGs), which address maternal and child health. Following this, the National Strategy for Maternal Health in

Bangladesh was formulated and approved in 2001, aiming to strengthen the provision of essential obstetric care and improving the utilization of services.[51]

Another governmental initiative (with support from UNICEF) was the Women's Right to Life and Health Initiative (which started in 2000 for four years), aiming to provide comprehensive EmOC in the country's district and sub-district hospitals.[52]

In 2008, the Strategic Directions for Enhancing the Contribution of Nurse-Midwives to the Attainment of MDGs 4 and 5 was jointly developed by the Government and development partners. Its proposed new programmes included 6-month advanced midwifery education for registered nurse-midwives to become certified midwives, and training of new cadres of midwifery personnel such as registered junior nurse-midwives.[53]

Recently the Government of Bangladesh in collaboration with the World Bank and WHO initiated a "demand-side financing maternal health voucher scheme" for poor mothers in 21 sub-districts of Bangladesh. Under this scheme poor mothers are identified by local committees on the basis of certain criteria and provided with vouchers to buy maternal health-care services (including treatment for obstetric complications).[54] This scheme allows poor patients to get inclusive midwifery services (such as visits to private health care, health investigations and deliveries).[55]

Although all maternity services are free of charge, the country has a partially implemented policy of cost recovery, through registration tickets for the patient.[56]

In order to incentivize people to increase the use of the health facilities for deliveries, there are benefits stipulated for both women and practitioners in terms of deliveries and caesarean sections.[57]
One priority for human resources for maternal and newborn health is to develop a deployment plan of the trained midwives and strengthen regulation to ensure 24/7 quality midwifery services in health facilities. This requires a strong body of experienced midwives to act as tutors and supervisors. There is also the commitment of gradually replacing community skilled birth attendants with fully trained midwives to provide community and facility-based services.[58]

3.5 Role of the private sector

In Bangladesh, the growing private health sector is not well understood, not monitored, not evaluated and poorly regulated. While there are more and more private establishments in cities, it is in the countryside that private practitioners flourish. Traditional healers, homeopathic practitioners, village doctors (rural medical practitioners), community health workers (CHWs) and retail drugstores all sell allopathic medicine on demand.[59] In addition, all these informal providers, deeply embedded in the local community and culture, also diagnose and treat illnesses despite having no formal professional training.[60]

The sector has an emerging cadre of semi-qualified community health workers / volunteers, who are formally trained by NGOs (such as BRAC, Gonoshasthya Kendra etc), whose numbers have been increasing since the 1990s with the expansion of primary health care infrastructure in the country.[61]

3.6 The health system

After its independence in 1971, Bangladesh had one post-graduate medical institute and eight medical college hospitals, along with a small number of clinics, health centres, and dispensaries. By 2006, under the authority of both Health Services and Family Planning wings of the bifurcated MoHFW, heath services had grown substantially.[62]

The Ministry of Health is sub-divided in two distinct and quite independent wings: the Directorate General of Health Services and the Directorate General of Family Planning.[63] Each has a distinct budget, Director, infrastructure, administrative scale and programmes. Both are involved in maternal health.[64]

Bangladesh has a large government-managed health infrastructure. There are different levels of health care providers under the Directorate General of Health Services (DGHS) and Directorate General of Family Planning (DGFP), providing midwifery services, such as obstetrician-gynaecologists, doctors, registered nurse-midwives, medical assistants, family welfare visitors and community-based skilled birth attendants.[65] There are almost 500 health complexes at the sub-district level that provide childbirth and complications management, without having facilities for caesarean section. However, there is a system of referral from sub-district to district level that inhibits use of these facilities. Besides, numerous private clinics have been established in recent years around the country that provide deliveries, including caesarean sections.[66]

Comprehensive emergency obstetric services care is provided in all Upazila Health Complexes, while basic emergency obstetric care is provided at the Union level. Health workers of the DGHS and the DGFP trained as community-based skilled birth attendants (SBAs) are working in villages, at the community level. Registered nurse-midwives are providing some maternal health services at the Upazila level, district health facilities, and tertiary hospitals, but they are not fully utilized for midwifery services.[67] Table 1 presents the organizational setup in the public sector.[68]

Table 1. Bangladeshi Public Health System (CEmOC – Comprehensive Emergency Obstetric Care, BEmOC – Basic Emergency Obstetric Care) (adapted from Reference 68).

Administration unit	Number of units	Health facilities and functions
Division	6	CEmOC facilities: Medical colleges with 650 beds, CEmOC
District (Zila)	64	CEmOC facilities: There is either a Sadar hospital (52) or a general hospital (13) in each district head quarter, each having 100-250 beds. Other special facilities for emergency obstetric care and a number of teaching hospitals
Sub-district (Thana/ now Upazila)	481	CEmOC facilities: Upazila Health Complexes, with 30-50 beds (obstetrician + anaesthesiologist)
Union (Union)	4,498	There are four types of static health facilities at the union level with BEmOC facilities: rural health centres, Union sub-centres (1,362), Union health & family welfare centres (87) and community clinics. The main workforce at this level are HAs (males), FWAs (females), medical assistants and family welfare visitors (midwives role)
Village (Gram)	80,000	Community-based SBAs for home delivery

4. Numbers, distribution, movements

4.1 How many midwives /providers of midwifery services in the country?

Bangladesh has one of the lowest nurse/population ratios in the world and the capacity of the existing training institutions is insufficient to significantly increase these numbers in the near future.[69]

In Bangladesh a nurse-midwife performs the function of a midwife.[70] They are providing maternal and newborn services mostly where other providers are not available or when they have a strong personal interest in midwifery services.[71] Currently, there are approximately 27,000 nurse-midwives working in health facilities down to the Upazilla level and nearly 2,000 new nurse-midwife graduates of both public and private sectors register every year.[72,73]. However it is estimated that not even 20 percent of them perform midwifery services at any given time.[74]

While the family welfare visitors now receive six months of in-service training on midwifery to become skilled attendants, thus far only 3,000 have been trained, falling far short of the goal of 13,000 trained community skilled birth attendants by 2010. As a result, there are insufficient numbers to provide 24/7 maternity services at union level, further aggravated by absenteeism and unfilled vacancies.[75]

The government committed to train 13,500 needed skilled birth attendants by 2010 in a six-month "intensive and competency-based" course and to use them to increase the rate of assisted deliveries from 13 percent to 50 percent by 2010, as stated in the Bangladesh National Maternal Health Strategy 2001. The pilot programme was initiated in 2003. The Nursing Council approved a three-month additional course on management of bleeding in pregnancy, childbirth and postpartum, and dealing with complications in 2007. By 2009, 205 skilled births attendants had attended this course. By the end of 2008, 4,000 community-based skilled births attendants had been trained and the programme expanded to 56 of the 64 total districts.[76]

4.2 Their distribution per region

The Bangladesh Health Workforce Strategy of the Ministry of Health and Family Welfare (2008) identified a deep geographical imbalance when it comes to health cadres**:** While the majority of people live in rural areas, the majority of health professionals work in urban areas. With no incentives for posting and retaining health workers in rural and remote areas, the vacancy rates in government health services are much higher in remote Upazilas than those near major cities.[77]

The shortage of heath providers is acute in spite of the country having a good coverage in health facilities. There are 419 health facilities performing BEmONC (at least one midwife per facility) and 132 sub-district hospitals performing CEmONC (more than one midwife per facility and at least one surgeon).[78] At the Union level 3,725 facilities (at least one auxiliary midwife) provide essential midwifery services (i.e. normal deliveries, non BEmONC and CEmONC). However, only 16 percent of qualified doctors practice in rural areas.[79]

4.3 Attrition, retirement, abandon, migration

Retention is difficult in terms of trained health personnel, especially at the sub-district level.[80] Poor work conditions, poor salaries and incentives, lack of career path and promotion

prospects, lack of professional autonomy, inconsistencies in transfer and posting policy, availability of better opportunities in private sector and abroad are the main reasons for health cadres leaving their posts.[81]

4.4 What are the needs? Projections and time to cover these needs with the current capacity

With approximately 3.4 million births per year, Bangladesh would need 20,000 midwives to provide service to every birth in the country by 2015.[82] Many more would be needed to serve the entire population for antenatal care, post-natal care and family planning.[83] Ideally this number should be easily attained, as there are almost 26,000 nurse-midwives in the country. However, the underutilization of nurse-midwives for midwifery services triggers the need for more specialized midwifery cadres.

The Government, with the help of UNPFA or and WHO, committed to educate approximately 3,000 midwives by 2015. The six-month post-basic midwifery training (seen as a short-term solution) and the direct-entry midwifery programme (the long-term solution) are the most recent related initiatives.[84]

5. Midwifery education

5.1 Institutions for midwifery education (public, private and capacity)

Registered midwife

Bangladesh has been offering the three-year diploma in nursing and midwifery in nursing institutes since the establishment of the country.[85] During the whole learning period six months are dedicated to midwifery training.[86] Following this basic preparation, graduates have two options for continuing education:

- The one-year post-basic bachelor degree in nursing science is opened for those who have successfully completed the three-year diploma in nursing and midwifery course.
- The two-year post-basic bachelor of science in nursing/public health nursing, offered at the College of Nursing, University of Dhaka.

The graduates from these programmes are registered as registered nurse-midwives by Bangladesh Nursing Council.[87]

Currently Bangladesh counts 74 schools for midwifery education:[88]

- 47 public schools for combined nursing + midwifery programme (3 years in total with 6 month per year spent on midwifery training)
- 24 private schools for combined nursing + midwifery programme (3 years total with 6 months per year spent on midwifery training)
- 3 public schools for nursing education followed by midwifery education programme (6 months)

Both public and private schools of nursing combined with midwifery programmes are accredited.[89]

The three-year direct entry midwifery diploma course is one of the current top priorities for human resources for maternal and newborn health, being scheduled to start in 2012.[90] The MoH asked UNFPA to provide arguments and projections for this initiative.[91]

Meanwhile a private University (BRAC University) is on the way to start a School of Midwifery in 2011-2012, with support from several international donors (DFID, Gates Foundation) and technical support from ICM.

FWAs

FWAs are grass-root level service providers within the Government's Health and Family Planning infrastructure. The curriculum for training Family Welfare Assistants (FWAs) and Female Health Assistants was established in year 2000.[92,93] These community workers are trained for six months in midwifery in district level hospitals to become community-based SBAs. Started in 2003 as a pilot, the training programme has been expanded to improve access to skilled care in the communities.

In order to achieve the target of increasing the skilled birth attendance to 86 percent by 2015, the government planned to cover in phases all 464 rural sub-districts within 64 districts of the country with 17,700 community-based SBAs. Trainees were certified and registered as skilled birth attendants by the Bangladesh Nursing Council and began performing services in their area.[94] Currently, there are approximately 6,000 community-based SBAs working in the community.[95]

FWVs

The 18-month family welfare visitor training which was running in 18 training institutes had been stopped during the 4th Population Programme (1993-1997), and there is no clear direction or plan for it to be continued.[96] Many FWVs have retired and have not been replaced at Union or Upazila levels.

5.2 Curricula (theory vs. practice)

To improve the performance of nurse-midwives, the curricula of both Diploma and Bachelor of Science in Nursing has undergone major revisions. An improvement was the extension of midwifery training, both in theory and practicum. The revised curricula have been implemented for combined public/private nursing and midwifery programs since 2008 and for public nursing followed by midwifery education since 2010[97,98].

Among the curricula all schools only the one of the six months midwifery training following nursing education has included all of the WHO-ICM competencies[99].

Table 2 Training and education of various types of maternal health care providers, Bangladesh, 2006

Type of health care provider	Annual intake	Total no. (2006) / main working place	Requirement for entry	Education and training	Key maternal health services provided
Specialist in gynaecology and obstetrics	143	1,070	MBBS	Minimum 4 years of training and education for MS and FCPS degrees 2 years of training and education for diploma	BEOC, CEOC, ANC
Anaesthesiologist	152	860	MBBS	Minimum 4 years of training and education for MD and FCPS 2 years of training and education for diploma	Anaesthesia
General Physicians	3,200 1,475 in public)	44,632	12 years of schooling	5 years of training on medicine, surgery, gynaecology and obstetrics 1-year internship in medicine, surgery, gynaecology and obstetrics wards	ANC, BEOC, PNC, MR, AC, FPS

Nurses/ midwives	1,500 1,020 in public)	40,040/ Hospitals: district and sub-district	10 years of schooling	Training on nursing for 3 years and midwifery training for 1 year	ANC, BEOC, PNC, MR, AC, FPS
Medical assistants	240	4,348	10 years of schooling	3 years of training on treatment of common disorders	ANC, BEOC, PNC, FP
Family welfare visitor	None since 1995	4,286 / MCWCSs , Sub-district and union + satellite clinics	10 years of schooling	18 months of training on MCH, family planning, and contraception + 6 months midwifery training for some	ANC, BEOC, PNC, MR, AC, FPS
Family welfare assistant	None since 1995	23,500	10 years of schooling	30 days of training on family planning	ANC, PNC FPS
Community-based SBA	1,000	1,500 / Communities and homes	FWA or Female Health Assistant	6 months of training on BEOC and ENC + at least 9 months supervised work experience	ANC, BEOC, PNC, FPS
Health assistant	None since 2004	21,000	10 years of schooling	3 months of training on limited preventive and curative care, immunization	Tetanus toxoid
MBBS=Bachelor of Medicine, Bachelor of Surgery; AC=Abortion care; ANC=Antenatal care; BEOC=Basic essential obstetric care; CEOC=Comprehensive essential obstetrics care; ENC=Essential newborn care; FCPS=Fellow of College of Physicians and Surgeons; FPS=Family-planning services; MCH=Maternal and child health; MD=Doctor of Medicine; MR=Menstrual regulation; MS=Masters of Surgery; PNC=Postnatal care					

(Source: Public-sector Maternal Health Programmes and Services for Rural Bangladesh, Malay Kanti Mridha, Iqbal Anwar, and Marge Koblinsky, ICDDR, B, 2008 & Dr Nazrul Islam presentation[100])

The three-year direct entry midwifery course curriculum is under development.[101]

While the newly graduated nurse-midwives will work as rotational nurse-midwives, the six-month post-graduation trained ones will be posted in the area they worked before as midwives in the maternity units.[102] The six-month midwifery training course is scheduled to continue along with the plan to introduce a three-year training course for direct entry of midwives.[103]

5.3 Teachers and tutors (ratio to students, skills)

The Bangladesh Nursing Council, with the help of UNFPA and WHO organized in 2010 a one month training course for trainers of qualified nurse-midwives. There are no dedicated posts for teaching staff, but 20 nurse-midwives have been trained in line with the ICM competencies to run the six-month post-basic midwifery training according to the international standards. Another 20 nurse-midwives are going to be trained in 2011 in order to expand the six-month post-basic midwifery training and to run the Direct Entry Midwifery Programme.[104,105]

Until now 60 midwives have graduated from the course.[106] They will provide 24-hour services in health facilities, working in a team of four midwives per sub-district facility.[107]

There is a certain degree of self-selection of the nurse-midwives to get training as teachers, as they have to agree to spend the whole six month training period at the centre, speak English and be interested in midwifery activities. Having further education (Master degree or PhD) is not obligatory.[108]

5.4 Supervision and support, in-service training

Until the introduction of a direct-entry programme, the short-term six-month post-basic midwifery training of the nurse-midwives will remain the main midwifery training of working nurse-midwives.[109]

6. Regulation, status and legislation

6.1 Regulation and status of the profession

For the moment there is no legislation recognizing midwifery as an autonomous profession. However, the process is on going to implement the regulation and certification of the new cadre of midwives, who are developed in the country.[110] The process to protect the midwifery title through the Bangladesh Nursing Council is on-going and it might be implemented during 2011.[111]

The main current midwifery service providers, nurse-midwives, are regulated through the same regulatory body as the nurses. The registered nurse-midwives in the country are authorized to practice all essential WHO and ICM competencies, and their ongoing six-month post-basic midwifery training follows ICM and WHO guidelines.[112]

To ensure the quality of education, care and services, a roving Government team monitors and supervises both the educational sites and the trained midwives working in maternities.[113]

7. Professional organization/ association

7.1 Number of associations, when they were established, membership, partnerships

A midwifery association is important to professionalize the profession. The only midwifery association in Bangladesh was established in October 2010 under the name of the Midwifery Society.[114]

7.2 Mission of the Association

The mission of the association is to promote the midwifery profession and importance of midwifery services within the population. However the association is very young and still needs to shape its mission and intentions.

7.3 Influence of the association in the field of midwifery

The president of the associations follows closely the new initiatives related to introducing a new midwifery cadre to tackle maternal health in Bangladesh. The society was active in organizing events related to the International Day of Midwife, 5 May 2011.

8. Inputs from international and donor agencies

8.1 Programmes to support the country's health system strengthening

A human resources task group, comprising relevant Ministry of Health officials and development partners, monitors the overall progress of human resources for health. Currently there is a lack of coordination between programmes, as different operational plans addressing maternal and newborn health are implemented by different departments of the Ministry of Health. Reflecting this situation, external support to human resources for maternal and newborn health is also being directed to different departments of the Ministry of Health, and in some cases, at lover level, in support to local level recruitment.[115]

UNFPA together with ICM jointly launched the global Investing in Midwives Programme in 2008 for strengthening midwifery skills and workforce in low-resource countries for the achievement of MDG 5. The programme focuses on four major areas for strengthening midwifery services: education, association strengthening, regulations and advocacy[116]. Bangladesh and Nepal are on the list of target countries.[117]

The H4, in its initiative for Accelerated Implementation of the Maternal and Newborn Continuum of Care in July 2008, targeted Bangladesh among the 25 high priority countries.[118] UNFPA, jointly with UNICEF and WHO, and supported by DFID and EC has implemented this initiative in four districts until 2010, and was expanding in 2011.[119]

8.2 Budgets for maternal health, breakdown for midwifery

The total health sector budget in 2008 and 2009 was 4.7 billion, with 106 million allocated to reproductive health both in 2008 and 2009.[120]

The project to improve access to maternal health services in four selected districts was done with field implementation by the Government and technical support from UNFPA, UNICF and WHO.[121] The total budget for this project was US$ 31,258,650.

A survey on maternal mortality (BMMS) has been planned under the HNPSP in 2010. The survey covered all indicators related to Maternal Mortality and Morbidity. Having as key donors the Government, UNFPA and AusAID, the cost of the survey was estimated to US$ 2.3 million.

9. Main challenges

9.1 Status and recognition

The lack of the midwifery as profession was a big challenge *per-se*. Midwifery being included in the long list of a nurse-midwife attributions and the contact rotation between different services were drawbacks from midwifery service providers' recognition and acceptance by the population. This has probably been one of the main reasons for women preferring giving birth at home and in the presence of a TBA.

9.2 Deployment and retention

There is a lack of midwifes' deployment. The government advertises for the nurse-midwifery posts and the deployment happens though a contest. However there is a big issue of coverage, with urban areas being privileged and preferred for working and rural and remote areas struggling to fill the openings.

9.3 Initial and continuous training

A short-term training in midwifery according to the international standards has been introduces only recently for already serving nurse-midwives. Beforehand, it is not clear how and where in-service training took place.

9.4 Relationship with other categories of health workers

The relationship with other professional bodies is generally good in the case of nurse-midwives. However it is estimated that the new cadre of midwives being trained will have a bigger autonomy and a different accreditation. It is therefore too early to predict an evolution of the midwives' relationships within a team.

10. Lessons learnt, perspectives for the future

Free services, whether from government or from NGOs, do not necessarily reach the poorest. There is a need to adopt strategies for poor people in order to achieve equity in terms of access to, and use of, maternal health-care services.[122]

The "demand-side financing maternal health voucher scheme" for poor mothers together with the policy of menstrual regulation are examples of innovations that are helping tackle maternal mortality in Bangladesh. Moreover, the recent decisions to strengthen midwifery skills though midwifery training course for already in-service nurse-midwives and midwifery direct entry programme for the new comers demonstrate a dynamic government committed to achieving its MDG 5 target by 2015.

According to experts, community-based skilled birth attendant programme should be strengthened and more FWAs should be trained, recruited and deployed as community-based skilled birth attendant along with family welfare visitors. A two years diploma for community midwifery has been also proposed for introduction (Press Release, 5 Aug 2010).

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