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'Midwives are the backbone of our health system': Lessons from Afghanistan to guide expansion of midwifery in challenging settings

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A B S T R A C T

Background: over the last decade Afghanistan has made large investments in scaling up the number of midwives to address access to skilled care and the high burden of maternal and newborn mortality.
Objective: at the request of the Ministry of Public Health (MOPH) an evaluation was undertaken to improve the pre-service midwifery education programme through identification of its strengths and weaknesses. The qualitative component of the evaluation specifically examined: (1) programme strengths; (2) programme weaknesses; (3) perceptions of the programme's community impact; (4) barriers to provision of care and challenges to impact; (5) perceptions of the recently graduated midwife's field experience, and (6) recommendations for programme improvement.
Design: the evaluation used a mixed methods approach that included qualitative and quantitative components. This paper focuses on the qualitative components which included in-depth interviews with 138 graduated midwives and 20 key informants as well as 24 focus group discussions with women.
Setting: eight provinces in Afghanistan with functioning and accredited midwifery schools between June 2008 and November 2010.
Participants: midwives graduated from one of the two national midwifery programmes: Institute of Health Sciences and Community Midwifery Education. Key informants comprised of stakeholders and female residents of the midwives catchment areas.
Findings: midwives described overall satisfaction with the quality of their education. Midwives and stakeholders perceived that women were more likely to use maternal and child health services in communities where midwives had been deployed. Strengths included evidence-based content, standardised materials, clinical training, and supportive learning environment. Self-reported aspects of the quality education in respect to midwives empowerment included feeling competent and confident as demonstrated by respect shown by co-workers. Weaknesses of the programme included perceived low educational requirement to enter the programme and readiness of programmes to commence education. Insecurity and geographical remoteness are perceived as challenges with clients' access to care and the ability of midwives to make home visits.
Key conclusions: the depth of midwives' contribution in Afghanistan – from increased maternal health care service utilisation to changing community's perceptions of women's education and professional independence – is overwhelmingly positive. Lessons learned can serve as a model to other low resource, post-conflict settings that are striving to increase the workforce of skilled providers.
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Introduction

Afghanistan, one of the poorest countries in the world, has some of the most alarming health indicators, particularly for women and children. When Afghanistan emerged from Taliban rule at the end of 2001, the health system was essentially destroyed. In 2002, Afghanistan's national maternal mortality ratio was estimated between 1600 and 2200 maternal deaths per 100,000 live births (Bartlett et al., 2005). Other reproductive health indicators were also concerning; only 4.6% of Afghan women received antenatal care and 6% delivered with a skilled provider. The contraceptive prevalence rate was 2% and the total fertility rate was 6.3 (CSO, 2003).

The education of girls was forbidden during the Taliban regime, resulting in the deterioration of the female skilled health care workforce. In a country where sociocultural practices restrict women from receiving health services from male providers, these circumstances severely hampered women's access to health services. The Human Resources Department reported in 2003 that there was a severe shortage of female skilled birth attendants (SBA) in general and only 467 midwives in the country (MOPH, 2003a).

International aid agencies responded to the health crises, and in partnership with the Government of the Islamic Republic of Afghanistan, significant efforts have been made throughout the last decade to improve maternal and child health. In 2003, the Ministry of Public Health (MOPH) contracted with non-governmental organisations (NGOs) to implement its Basic Package of Health Services (BPHS), which provides community health-oriented primary care. The BPHS, in conjunction with the Essential Package of Hospital Services, remains the cornerstone of health service delivery in Afghanistan.

In response to the appalling health indicators for women and children and to ensure women's access to timely skilled care, particularly in rural/remote areas, the MOPH (2003b) with support from major donors (USAID, World Bank and European Commission) supported two pre-service education programmes to train and graduate midwives: (1) strengthening the existing Institutes of Health Sciences (IHS), a two year programme to provide midwives for provincial, regional, and national/specialty hospitals; and (2) establishing Community Midwifery Education (CME), an 18 month programme for community-based facilities. Both the IHS midwifery programme and the CME programme have the same content and the graduates of each programme have an identical set of essential competencies for midwifery services; the major difference is the planned deployment to the health facility of employment. Both are recognised by the MOPH.

Following a successful pilot (2002–2004), the CME programme was endorsed by the MOPH in 2003 and consequently, the number of programmes proliferated at a rapid pace. A national standardised curriculum binds the programmes, and the quality of education is regulated by a National Midwifery and Nursing Education Accreditation Board (NMNEAB).

Methods and approaches

The evaluation of the pre-service midwifery education programme in Afghanistan, the first of its kind in the country, was conducted with midwifery schools in eight provinces from 2008 to 2010. Qualitative findings were drawn from in-depth interviews with 138 graduated midwives and 20 key informants, as well as 24 focus group discussions with women.[1]

For the first stage of the sampling plan, eight accredited schools were purposively selected from the 24 schools that were operating in the country within the evaluation period. Geographical location (included areas in north, south east and west), school type, donor support and security were considered; the sampled schools were deemed to be broadly representative of midwifery schools in Afghanistan in regards to ethnicity, language and culture.

Interview guides consisted of 28 questions exploring how to improve both the midwifery education programme and the deployment experience of recently graduated midwives. The tools were piloted in a simulated environment. Inter-assessor and intra-assessor reliability checks were performed (83% and 98% respectively) to ensure homogeneity of the assessors' cohort. The interviews were recorded and transcribed verbatim in Dari[2] and translated into English. Their accuracy was checked by researchers fluent in both languages. The 26 interviewers were selected from the Afghan Midwifery Association (AMA) and midwifery faculty from schools which were not part of this assessment. Interviewers were trained in qualitative interviewing techniques, the interview tool, and research ethics including confidentiality. Given the AMA membership is over 2000, many midwives are members and it would not have been feasible to engage midwives who were qualified as interviewers/assessors who were not part of the AMA, particularly in regards to criteria such as ability to travel. The study team did not perceive involvement of the AMA as assessors to be a conflict of interest, as the AMA has no financial involvement in CME programmes.

The second stage of the sampling plan identified all (~1800) working (trained) midwives and selected a random sample of 20 midwives from each school (in schools with fewer than 20 midwives, all were interviewed). Individual interviews were carried out with a total of 138 midwives to capture their perceptions on the quality of their training, the impact of their deployment in the community, barriers to providing optimal reproductive health care, and their recommendations to improve the pre-service education programmes and deployment experience.

Key informants (KI) were interviewed to obtain their perspectives on the strengths and weaknesses of the programme and their recommendations for improvement. In total we planned to interview 28 individuals, representing different institutions from the eight target provinces. 19 individuals willingly participated and included: directors of midwifery schools, health service managers, provincial and national health directors and representatives from the AMA and NMNEAB. There were nine non-respondents.

Focus Group Discussions (FGDs) were held with women in the catchment areas of 14 health facilities (a subset of the original 138 midwives studied). Two focus groups were conducted: one with 'the midwives patients' and the other with women who were not her patients. In insecure provinces it was not possible to conduct FGDs as planned and a total of 24 FGDs in seven provinces occurred.

An inductive qualitative approach was used to analyse the transcripts and produce a conceptual framework of categories and themes, 'close to the data, words and events' (Sandelowski, 2000). Following the identification of main and subthemes, we provided interpretation of the themes by including information from field notes to elaborate each theme. We intended to present descriptions of views expressed by study participants and direct quotes from midwifery graduates, key informants and the women are shared.

Ethical approval for human subjects' research was obtained from Johns Hopkins University and MOPH ethical review committees. Written or verbal consent was obtained from study respondents based on their education/literacy level.

Findings

All midwives were female per cultural preference. Of the midwives identified, 92% worked in service provision (for varying

[1] The quantitative results have been submitted separately for publication.

[2] Dari is one of three official languages in Afghanistan.

lengths of time since graduation) and 8% in teaching. To address faculty shortages in the early days of the programmes some new graduates became teachers and the midwife teachers were retained in the sample.

Strengths of the midwifery education programme

Most of the midwives described satisfaction with the quality of the education they received, rating the programme from 'very good' to 'excellent'. They perceived the strengths to include: standardised and evidence-based content using up-to-date teaching methodology, standardised learning materials, and provision of support in clinical training. The respondents also appreciated the supportive learning environment offered by the programmes, such as culturally appropriate hostels and childcare for students from remote areas.

Another often-repeated aspect of the midwives' training was that it provided them with the knowledge and skills needed to fulfil their clinical responsibilities. The training was perceived to be strong in antenatal and postnatal care; management of normal labour and deliveries; managing retained placenta; breech deliveries; and family planning services. This midwife explains her feelings of competence:

> I repaired cervical and vaginal lacerations, inserted an IUD (intra-uterine contraceptive device) that another midwife could not do, did episiotomies, removed retained placentas, did many breech deliveries, delivered twins and managed a case of shock. All have been done on my own. This is a source of pride for me.

However, about half of the midwives felt less prepared in the management of pre-eclampsia/eclampsia, shock and haemorrhage.

Teaching evidence-based practices and new standards of care had a positive effect on the midwives' levels of confidence. They reported being socially recognised and appreciated by other co-workers for their competency. Many midwives also reported opportunities to share their updated knowledge and clinical skills with others. Some respondents spontaneously mentioned mentoring doctors and medical students as one midwife stated:

> I am really happy and feel proud that I can teach students from the medical school some of the vital skills related to gynecology and obstetrics.

Many midwifery graduates highlighted the cultural sensitivity of the programme and consideration of local customs and values, resulting in higher perceived quality of care delivered to clients. One midwife, who attributed cultural sensitivity to the training she had received on professionalism, stated:

> My client told me that you are really kind and caring, and I have not been treated this well before by other providers.

These finding were supported by the views of the overwhelming majority of KIs, which included praise for the CME policies and practices such as appropriate student selection according to the needs of the rural communities. For example, a MOPH employee said:

> I'm very impressed with the quality of education in the CMEs. I observed several CMEs directly. They have good results with deployment and according to the feedback we've received from the community, everyone is satisfied.

Another articulated the feelings of many of the key informants:

> The students are very committed which is a sign of the sustainability of the program. There is also ownership of the program, because the program is implemented in close collaboration with and support from the local communities.

Areas identified for strengthening

Many of the midwives expressed concern regarding entry levels of education for midwifery students. They reported that students in the lower range of required education level (nine years prior to entering midwifery school) faced more challenges learning and slowed the pace of learning for all.

Another finding was reported delays in arrival of training materials (books and anatomical models), especially upon the opening of new schools. Some respondents expressed concerns that midwifery faculty lacked professionalism in some areas of teaching, for instance, not being able to use audiovisual aids such as overhead projectors, and occasionally behaving disrespectfully toward the students. In addition, some respondents indicated that some schools have inadequate numbers of faculty.

The study findings reveal that preceptor-to-student ratios were not always implemented according to the national educational standards (1:4–6) and low clinical caseload was reported as an impediment to students' practice. The foremost challenge reported was incongruence between the standards of care taught in school and the actual care observed in the clinical sites, for instance, lack of compliance with infection prevention practices.

Almost all CME participants were concerned about not being recognised as formal civil servant employees by the MOPH. They indicated that they were not treated as fully-fledged health care professionals as one community midwife said:

> Because I have not graduated from twelfth grade, I am working unofficially, my salary is very low, and lots of my classmates do not work. If initially I was informed about this fact, I would never have studied this midwifery program.

Effects of the midwifery education programme

The midwives interviewed reported that women in communities where they had been deployed were more likely to deliver at the health facility or at home with a skilled midwife. Midwives' outreach activities were reported to facilitate building of health networks within communities, including reaching influential figures such as religious leaders, community elders, and teachers. One midwife described the helpful effects of male involvement in delivering health messages and the resultant increase in demand for contraception by the women under their influence.

Midwives reported many examples where the local community expressed appreciation for the care they have provided. This recognition has been a source of pride for them, and has motivated them to make extra efforts on behalf of the women in their communities. Midwives shared stories on how they build the trust of their community:

> I went by horse and motorbike there [the woman's house] with my own money, purchased serum, and removed her retained placenta. I probably saved the mother's life and they were all very grateful.

After introduction of the midwifery programmes, there was a trend toward seeing more women outside their homes in some conservative communities. Family restrictions against women's mobility eased for women seeking care at the health facility, and furthermore, for those attending school. As a result, the applicant pool to the midwifery programmes increased significantly and recruitment of future midwives is no longer a challenge.

> In the beginning, people were dubious regarding the midwifery program but after my graduation and my working amongst them, they became interested in sending their women to the program because they were surprised by my positive results.

Another midwife echoed her words and added: *Now I am able to support my family and they are motivated to help me*.

Others mentioned the strong influence of family:

> At first, when I wanted to study midwifery my mother-in-law didn't allow me, but later she was so impressed that she sent her own daughter to midwifery school.

Key informants praised the positive impact of the midwifery programmes on the communities they served. Midwives are the 'pillars of our health system,' said one MOPH employee. 'This programme is 100% effective,' said another. A centrally-based reproductive health stakeholder mentioned, 'Villagers are extremely supportive, appreciative, and optimistic about the impact of our midwifery programs.'

Several interviewees quoted studies showing that antenatal care coverage has increased and births with SBAs from 5% to 19% and they attributed these changes to the midwifery programme, which has increased the number of practicing midwives to over 2000 in comparison to the 467 during Taliban times (another frequently mentioned statistic). Provincial health directors were particularly complimentary about the programmes, noting for example, in one province, 'Only 1% of women used to deliver in facilities, but now 30% do.'[3]

Barriers to provision of care/challenges to impact

Most of Afghanistan has villages that are scattered and remote, and lower level health facilities are located on unpaved roads. Harsh winters and lack of and cost of transport were noted by midwives as barriers to health care for some clients. Some clients do not access midwives because of the expectation of informal payments, even though care is supposed to be free.

The midwife respondents reported insecurity as a major impediment to their clients' accessing care, as well as to their own inability to make home visits. Due to the re-emergence of antigovernment elements, particularly in Southern/Southeastern Afghanistan, movement outside the homes, particularly for women, was significantly curtailed. Midwives reported that women in some families were not allowed to go outside their homes without a male escort, therefore decreasing their access to health services.

At times, communities requested midwives to provide care that was beyond their scope of practice. For instance, when midwives referred a complicated patient to a clinician for higher level care (e.g. caesarean section) their clients were disappointed, assuming the midwife should be able to manage the patient herself.

Inadequate resources in health facilities were mentioned as an impediment to the provision of quality care. Specifically, Manual Vacuum Aspiration equipment for post-abortion care and basic medications to treat common ailments were frequently missing. Moreover, the limited choice of modern contraception options was also reported to hamper care.

The majority of practicing midwives reported feeling discriminated against by other providers, especially doctors. At times, their education programme was belittled by their peers, particularly the length of training. Findings from the interviews reveal that in some health facilities midwives were openly insulted by doctors who are often in-charge of the health facility. In other instances, they were treated like *dayees* (traditional birth attendants) as one midwife said: 'The hospital director told me I don't see a difference between you and a cleaner in this hospital.'

Almost all midwives practicing where doctors also worked expressed frustration at the restrictions placed upon their scope of practice. Despite being trained to provide life-saving treatments (ICM, 2010), the majority of midwives indicated that they were not permitted to realise their full job description as endorsed by the MOPH because of professional jealousy and lack of information on the part of the clinicians. This was a greater concern for midwifery graduates from the IHS than community midwives practicing in health centres. Furthermore, the midwives felt frustrated by job descriptions that limited their ability to prescribe simple medicines for women's general health problems. Team work was also noted to be a challenge. According to the interviewees, managers rarely had transparent communication channels between all team members, often did not understand the role of midwives and did not share their vision for the health facility.

A few stakeholders mentioned that the NMNEAB contributed to the high standards of the midwifery programmes. One interviewee recommended that the Board could do more to help midwives receive recognition by:

> Doing more education and public relations work, advocating for higher salaries and more refresher training for the midwives, and decreasing the tensions between midwives and physicians.

Stakeholders universally appreciated the role of the Afghan Midwifery Association in advocating for midwives at the policy level, supporting assessments of the midwifery programmes as members of the NMNEAB, and increasing community awareness about the midwifery programme.

Several key informants also reported factors limiting midwives' impact in the community and job satisfaction: bias by supervising clinicians (especially at the provincial hospitals); lack of recognition of non-high school graduated community midwives as full status civil servants by the MOPH; low pay; heavy caseloads including consultation for non-reproductive/child health problems; gender and cultural limitations on mobility; and general insecurity restricting freedom of movement, home visits and hours of operation. One interviewee from the MOPH admitted:

> Our support to the midwifery programs is not adequate but we are committed to having more coordination with them because midwives are the backbone of our health system and if we don't empower them, we can't improve health in Afghanistan.

The beneficiaries' view

Women from the communities where the midwives worked had an opportunity to share their perceptions of the effects of the midwifery programme. They shared stories about complications of pregnancy including bleeding, infections and newborn mortality, as well as cases of maternal mortality among their relatives. Non-pregnancy problems mentioned included tuberculosis, malaria and mental health problems, as well as common childhood illnesses.

Women in all groups reported poverty, transportation problems, remoteness of clinics, limited hours of services and lack of providers as major barriers to accessing health care. A few women in more conservative areas needed their husband's permission to attend a clinic and occasionally this was denied. The following quote captures some of the manifold challenges Afghan women face:

> I am pregnant after four years and I want to deliver at the clinic, and my husband says that we do not have a donkey, money, or

[3] Data presented was specific to the study time and the locale of the interviewee.

> car. I don't know what to do, since all the women deliver at home here. We have lots of economic problems. The poor must surrender to God's will.

As an alternative to seeking care from a midwife or doctor, women reported seeing the *mullah* (Muslim cleric), *dayee* or community health worker. They bought medicines from local pharmacies and sometimes used amulets and herbal medicines.

An overwhelming majority of women who had seen a midwife were very satisfied by the experience and expressed gratitude for care received, highlighting midwives who made home visits, walked for hours or took a donkey to see them, and worked at night as one satisfied patient explains:

> I am happy with the midwife. Previously there was no midwife in our village and women were suffering bleeding and their children were dying. Now thanks to God, we have got a midwife and since have not seen a pregnancy death.

Another woman from a Southern province explained the generally positive reception of midwives in her village:

> People in the village are happy with them since they are female, because we cannot talk to male doctors…. If we go and see a male doctor, our men will kill us. These midwives are everything for us.

There were a few anecdotes about experiences of poor treatment by midwives. These included being verbally insulted and being turned away because the woman did not have enough money. In one case, a woman complained that the midwife was too young to do the job.

As general patient satisfaction was high, there were only a few recommendations about how to improve the quality of care delivered by the midwife. Most suggestions related to improving the community's access to care including: improving transport; increasing the number of health facilities; strengthening security; increasing the number of midwives serving the area; and expanding the midwife's hours of operation. Many women expressed their desire for greater availability of medicines dispensed by the midwife and expanding the range of problems treated by the midwife.

Overwhelmingly, women interviewed expressed enthusiasm about having their daughters and female relatives attend school and become midwives. A paucity of female teachers and schools for girls, insecurity, as well as occasional male relative disapproval, were described as barriers to their daughter's education.

Discussion

Extensive efforts by the MOPH, donors, technical partners and implementing NGOs revitalised a non-functional midwifery education system that launched 32 midwifery schools in 34 provinces and graduated 2954 midwives through November 2010, and is now reported at more than 3000. Despite these remarkable achievements, the number of schools has now dropped to 22 due to un-sustained funding. Nevertheless an additional 5000 midwives are needed to reach the estimated number for national coverage (UNFPA, 2011), and this paper seeks to provide recommendations on ways in which the future programme might be strengthened.

Extraordinary donor and MOPH support provided the positive context for rapid expansion. It is remarkable that the majority of midwives reported a high degree of satisfaction with the quality of their training, given the proliferation of midwifery schools in a short time period and the variety of NGOs administrating them. Establishing uniform, national standards is achievable even in a low-resource, post-conflict setting if attention is paid to the regulation and accreditation of midwifery schools (Smith et al., 2008). Although the Afghan midwifery model is only a decade old, by establishing a standardised competency-based curriculum, a formal accreditation process, and a professional midwifery association (Currie et al., 2007), it has avoided many of the pitfalls experienced by other countries such as Indonesia, which also attempted to rapidly increase its midwifery workforce, but with limited attention to quality of education and inconsistent post-training follow-up (Farooqi, 2009).

The study findings reveal that supportive elements of the midwifery programme should not be minimised for their contribution to the programme's success in a post-conflict and traditional society milieu. One powerful example is the model followed by community midwifery schools for selection and deployment. Students are hand-picked by their communities to attend training, which is often formalised by a signed letter of support from community leaders. This strategy has yielded higher deployment rates of community midwifery students compared to hospital midwifery students (Mansoor et al., 2012). At the same time, findings from our study demonstrate that midwives have developed robust relations with community leaders and other influential persons from their outreach work, and communities have expressed appreciation for the quality of care. This relationship between the community and midwives is important in the context of health service utilisation and quality of care, but a by-product is that it may provide midwives with an increased sense of security in often tense environments. This unique programme attribute offers lessons for other challenging settings. An evaluation of a community skilled birth attendance programme in Bangladesh also highlighted the need for advocacy, including mass media and communication intervention programmes, to mobilise support of community leaders, as well as bolster self-image of the SBAs (Bhuiyana et al., 2005).

It was not surprising that midwives presence improved utilisation of maternal and child health services, but we did not anticipate that midwifery graduates would increase their communities' enthusiasm for female education and mobility. In communities where midwives have been deployed, young Afghan women now see midwifery as a desirable profession and families are eager to send their daughters and wives to the midwifery programme such that applications exceed the number of spaces available. Our study shows that midwifery in Afghanistan has the potential to meet the needs of women with regard to further education and a meaningful career. This aspect of community driven female empowerment and development is welcome and considered especially important in rebuilding the social fabric of communities affected by conflict (Richards et al., 2004). Still, the public element of midwifery work remains a security challenge in most provinces (Wood et al., 2012).

Our evaluation identified programme weaknesses that should be re-examined and potentially reformed. In some cases, changes have already occurred or are under development (*see* Box 1 *for updates*). Firstly, a pre-service education programme for the training of a new health worker cadre, the community health nurse, has commenced. This programme was developed, in part, to address the persisting need for primary health care services at the community level which was brought to light in interviews indicating that midwives were delivering non-reproductive health services outside of their job description. Secondly, as a result of the evaluation findings, the community midwifery programme duration was lengthened from 18 to 24 months and seven new subject modules were added to the curriculum such as mental health.

The findings indicate that educating other maternal care providers, especially clinicians, about the benefits of midwifery practice for women and indeed for their own clinical practice could ease the reported discrimination of the clinicians and facility managers towards the midwives. Furthermore, new schools need

Box 1–Midwifery graduates' recommendations for improving education programme and integration into the health system with updates.

Recommendations	Updates (January 2013)
Increasing minimal education requirement to 12th grade	Being phased in: the revised CME curriculum indicates minimum of 10 years of schooling (MOPH, 2010)
Provide supplemental literacy/numeracy courses	An option and at programs discretion
Expand duration of and strengthen curriculum	Modules strengthened: anatomy and physiology, gender, professionalism, high impact interventions; FP (PPIUCD) Modules added: health system in Afghanistan; pharmacology; mental health; epidemiology; STIs and HIV; managing health care; behaviour change and communication
	English and computer classes are compulsory
Strengthen faculty	Post basic degree developed—yet to be implemented Revise education standards in line with ICM and WHO recommendations
Improve deployment—all schools follow the successful CME model	Advocacy with MOPH and other stakeholders re model of recruitment to IHS programs Replicate same model of education for community nursing
Improve refresher training and supportive supervision	Emphasize NGOs role Mentorship program initiated by AMA to address performance gaps and provide ongoing supportive supervision to remote midwives
Provide hardship allowances to faculty and midwives in difficult settings (rural and/or insecure)	Draft plan in place by MOPH
	Salary policy has been endorsed by MOPH and hardship allowance and performance based incentives for remote insecure areas has been considered
Offer professionalism and ethics courses for all health personnel, especially doctors	Advocacy ongoing

to assure that adequate resources are in place, including proficient faculty and supplies like books and models.

The value added of a midwife to maternal and newborn health was embraced in the in-depth interviews and FGDs with community members, the MOPH, and graduated midwives. These qualitative findings are echoed in the quantitative findings of the evaluation, which showed that maternal health service utilisation was significantly higher in provinces with a midwifery school and where midwives were deployed. The study team has developed recommendations in this respect. Firstly, high level advocacy with the MOPH, the Afghan Society of Obstetricians and Gynecologists and the medical training institutions is needed to champion midwives' status to be commensurate with their demonstrated contribution and MOPH-defined job description. Secondly, the MOPH could consider expanding midwives' prescribing privileges. Lastly, the MOPH should recognise community midwives as full-status civil servants with equal status to hospital midwives.

All the interviewees recognise the continuing challenges to improving access to care, yet the high levels of acceptability and satisfaction of the women are testament to the midwives' great efforts to provide culturally acceptable respectful and competent care. The barriers to care shared by our respondents are echoed in the Afghan Mortality Survey (MOPH, 2011) which reports a lack of money, transportation problems and distance to the facility as the most common reasons for not accessing midwifery services.

Although notable progress has been made over the past eight years in improving the quality, coverage, and utilisation of emergency obstetric services in Afghanistan, gaps remain (Kim et al., 2012). The interviewed midwives mentioned that they have to manage many serious cases at the community level, an added pressure on the midwives in a country with a variable referral system, especially in the winter months and in very insecure areas. Providing lifesaving interventions without the benefit or support of a regulatory framework (currently the missing pillar for midwifery in Afghanistan) can be risky business. Maintaining competence is especially challenging in such settings; regular refresher training and supportive supervision including regular clinical drills for emergencies (Frenk et al., 2010) should be a routine component of retaining competence and improving confidence in skills. As Farooqi (2009) notes,the most effective skilled attendant training programmes are those who are entrenched in an extensive support system that includes a referral network, professional mentorship and supervision, and opportunities for employment upon completion of training. Despite needing several thousand new midwives quickly, the Afghanistan MOPH recognises the need for balancing quality of education with numbers of midwives trained (MOPH, 2012) and their role as stewards overseeing and supporting the National Midwifery and Nursing Accreditation and Education Board is vital.

As equity in access to care attracts increasing attention in the global community in relation to achieving Millennium Development Goals 4 and 5,equity should be accounted for when planning the scaling up of interventions (Victora et al., 2012) and donors and policymakers need to be mindful of this as they consider investing further in midwifery training. Given wealth was the strongest determinant of SBA use in a study by Mayhew et al. (2008), the emphasis on the BPHS has led to higher quality of care provided to the poor, which represents a promising start in the reconstruction of Afghanistan's health system (Hansen et al., 2008). A study by Hirose et al. (2011) on care-seeking behaviours in Afghanistan underlines the importance of midwives and other health workers working closely with communities to increase health care utilisation and potentially reduce maternal mortality.

Although multisectoral factors, such as the expansion of roads and cell phone coverage likely contributed to the significant reduction in maternal deaths over the last 10 years (MOPH, 2011), evidence indicates that the deployment of almost 3000

community midwives within a strengthened health care system was an important contributor to this laudable success. There is little debate that in low-resource settings, midwifery services are core to public health initiatives, and indeed to communities, to reduce maternal and newborn mortality.

Conclusion

Clear and substantial progress has been made in Afghanistan since 2002 when the international community responded to the emergency health and development situation after the fall of the Taliban. Despite the challenges, the most encouraging progress in Afghanistan over the last decade is in maternal health (Editorial, the Lancet, 2011). The development of the comprehensive national midwifery education system has contributed to the reduction in maternal mortality. Despite increasing insecurity and cultural restrictions on women's education, employment and mobility, the programme has been remarkably successful (Walsh, 2007).

The information gathered indicates that the midwifery education programme, especially the CME, was well conceived and implemented. Many factors including the stewardship role of the MOPH and support of key stakeholders and donors contributed to this success. There are clear areas for strengthening in the midwifery education programme, which will further reduce maternal and newborn mortality in a sustainable manner.

Afghanistan remains a fragile state, fraught with risk, especially for women and children. The international community has a responsibility to safeguard these hard-won advances in midwifery education and apply the lessons learned to increase the number and quality of skilled birth attendants in other similar settings.

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