EVALUATION OF THE MIDWIFERY EDUCATION PROJECT

MARCH 2018

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TABLE OF CONTENTS

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INTRODUCTION

This Evaluation Report is concerned with the Action for Development (AfD) 2014-2017 Midwifery Education Project. The project provided a short term capacity building training course for qualified midwives in Afghanistan.

The report has five main sections:

1) The background to the project, describing the state of maternal healthcare provision in Afghanistan;
2) A description of the project;
3) The purpose of the evaluation and an overview of the methodology;
4) A presentation of the evaluation results including the impact of the project and learning for the future;
5) Conclusions and Recommendations.

THE BACKGROUND: MATERNAL HEALTHCARE IN AFGHANISTAN

Despite significant improvements in maternal healthcare in Afghanistan in recent years, it remains one of the most dangerous countries in the world to be a pregnant woman. Maternal and infant mortality rates are among the highest in the world. Table 1 below compares maternal and infant health statistics from Afghanistan, Nepal and Switzerland using UNICEF data published in a 2015 report. As you would expect the comparison with Switzerland, one of the richest countries in the world, is stark. However, a comparison with Nepal, a neighboring Least Developed Country (LDC)[1], reveals how concerning Afghanistan's maternal and infant health statistics are. The under-5 mortality rate in Afghanistan is almost three times higher than Nepal's. The infant mortality rate is more than twice as high. The proportion of births attended by skilled health personnel is low in both countries but it is 11% lower in Afghanistan than in Nepal. Reported maternal mortality rates are high in both countries: 330 per 100,000 live births in Afghanistan and 280 in Nepal. By contrast, in Switzerland the figure is 5. Antenatal care for at least one visit is comparable in Afghanistan and Nepal. 59% of women receive this visit in Afghanistan and this rises to 68% in Nepal. However, when you look at further follow-up visits, which suggests a greater depth of care, only 18% of women receive at least 4 antenatal visits in Afghanistan whereas in Nepal the figure is 60%.

Table 1. Maternal and Infant Health Statistics: Afghanistan, Nepal & Switzerland

Health Statistics	Afghanistan	Nepal	Switzerland
Under-five mortality rate (U5MR), deaths per 1,000 live births	91	36	4

[1] Both Afghanistan and Nepal are among the UN's list of 47 Least Developed Countries https://www.un.org/development/desa/dpad/least-developed-country-category.html .

Infant mortality rate (IMR), deaths per 1,000 live births	66	29	3
Antenatal care coverage for at least one visit (%)	59	68	-
Antenatal care coverage for at least four visits (%)	18	60	-
Proportion of births attended by skilled health personnel (%)	45	56	-
Maternal mortality per 100,000 live births (reported 2008-2012)	330	280	5

Source: UNICEF "State of the World's Children 2015" country statistics tables https://data.unicef.org/ (2012 figures)

The figures in Table 1 support the assertion that maternal, infant and child mortality rates are directly influenced by the number of practicing midwives in Afghanistan, Nepal and world-wide. Where there are more ante-natal visits and more midwives in attendance the maternal and infant mortality rates are lower. One of the reasons why Afghanistan's maternal and infant health statistics are so poor is due to the impact of the Taliban regime, which controlled Afghanistan from 1996-2001. The Taliban did not allow women to work as health care providers nor for male health care workers to give care to women. The exclusion of female health workers from the health services sector led to poorer maternal healthcare provision and consequently a rise in infant, child and maternal mortality rates. A 2002 UNICEF global survey[2] found that almost half of all deaths among women in Afghanistan aged 15 to 49 were due to pregnancy and childbirth. The main causes of maternal mortality are haemorrhage, eclampsia, pre-eclampsia, obstructed labour, sepsis and unsafe abortions, of which over 83% are preventable with timely interventions and family planning[3]. Such interventions would be routinely provided by a practising qualified midwife.

Since 2001, the Afghan Ministry of Public Health (MoPH), together with the World Health Organisation (WHO) and major donors including the World Bank, USAID and the European Community have made extensive improvements in maternal and infant health as Table 2 and figures 1 and 2 show below. Between 2002 and 2105 maternal and new-born mortality rates fell by 75% and 72% respectively. In 2003, the WHO together with the Ministry of Public Health of Afghanistan created the Basic Package of Health Services (BPHS). One of the most important components of this package was the emphasis on improving maternal and new-born health. To reverse the impact of the Taliban regime on maternal and infant health, the Afghan Government put in place a national training programme to train and employ midwives in the health sector. An immediate increase in trained midwives was desperately needed so the training was shortened from the initial four-year comprehensive programme to an intensive 18 month training course. As a result, over the last 15 years the quantity of trained midwives has significantly increased but the breadth and depth of their skills and knowledge has to a certain extent been compromised. Alarmingly, the most recent figures from the Afghan Ministry of Public Health for 2016 and 2017 show an upturn in infant and maternal mortality rates. This is most likely due

[2] https://www.unicef.org/publications/index_3684.html

[3] The State of Midwifery in Afghanistan, UNFPA, https://afghanistan.unfpa.org/sites/default/files/pub-pdf/MidwiferyReport_English.pdf

to a worsening of the conflict between Taliban and Afghan Government forces. Fighting has spread into new areas including Kunduz, Baghlan, Badakhshan and Sar-e-Pul.

Table 2: Afghanistan Maternal and Newborn mortality, 2002-2015

	Year			
	2002[a]	2005[b]	2010[c]	2015[d]
Maternal mortality ratio (MMR) (death per 100,000 live birth)	1600	821	584	396
Newborn Mortality (death per 1000 live birth)	165	129	77	45

Sources: http://www.who.int/gho/maternal_health/countries/afg.pdf, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4136668/, https://www.unicef.org/sowc09/docs/SOWC09-Panel-3.4-EN.pdf, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4237830/, http://cso.gov.af/Content/files/%D8%B3%D8%A7%D9%84%20%D9%86%D8%A7%D9%85%D9%87%20%D8%A7%D8%AD%D8%B5%D8%A7%D8%A6%DB%8C%D9%88%DB%8C%20%D8%B3%D8%A7%D9%84%201394/Health%20Facilities.pdf, https://dhsprogram.com/pubs/pdf/FR323/FR323.pdf , https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4136668/

a –the collapse of Taliban regime
b – 2 years after creation of BPHS there is an increase in productivity of health professionals
c – As a result of BPHS implementation and integration, as well as financial assistance from donors, there is a significant increase in BPHS facilities, active health posts and the supply of medication
d – Period that includes the AfD Midwifery Education Project

Figure 1

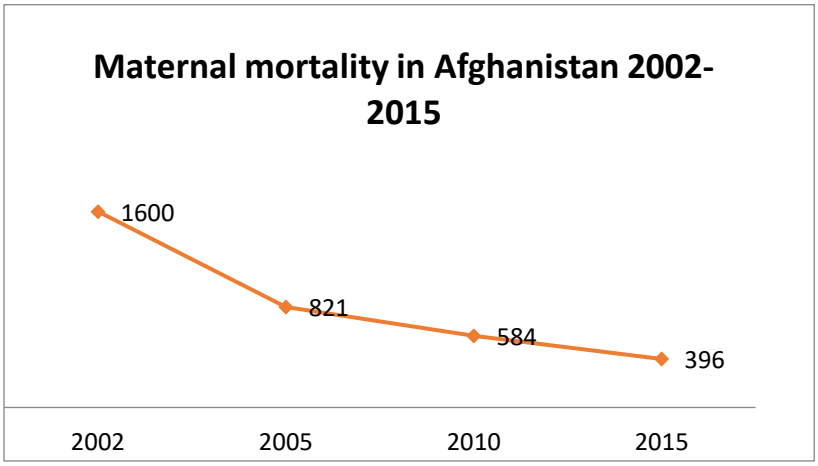
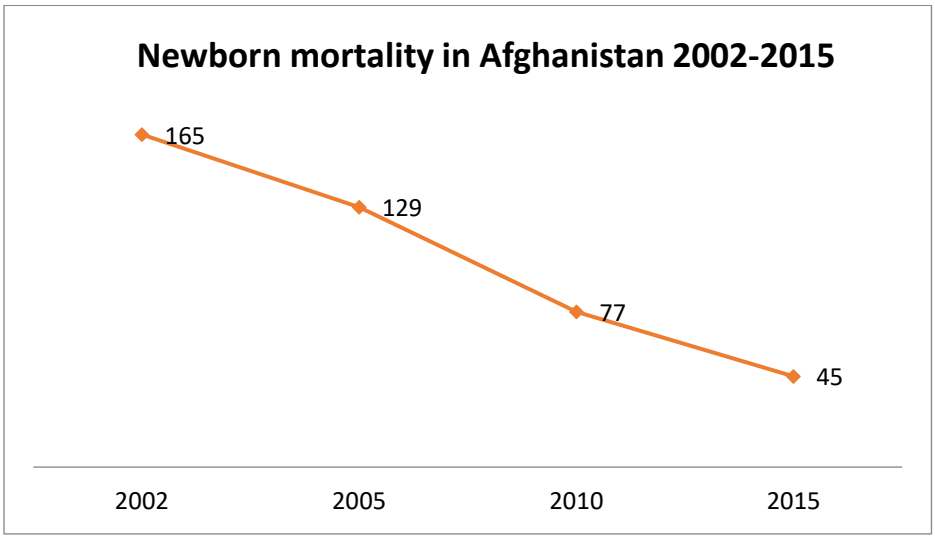


Figure 2



Whilst the training of midwives has been successfully rolled-out in urban areas, the same cannot be said of rural areas. Table 3 below shows the results of a health survey conducted by the Ministry of Public Health in 2015. The survey revealed that 79% of births in urban areas were assisted by a skilled health care provider and 76% took place in a health facility. However, in rural areas these numbers dropped to 42% and 40% respectively. The same survey showed that family planning information and advice only reached 23% of women and/or families in rural areas. Just 54.6% of women in rural areas received antenatal care from a skilled provider compared to 71.1% of women in urban areas. The high fecundity rate of 5.1 demonstrates the necessity for access to good quality health care and family planning advice and information in all the regions of the country. This is even more relevant in the rural areas where the fecundity rate is even higher and women bear about 7.4 children, on average, throughout their lives.

Table 3. Afghanistan maternal health statistics comparison between urban and rural areas

Health Statistics Urban vs rural areas	Afghanistan	
	Urban Areas	Rural Areas
Birth attended by a skilled worker	79%	42%
Birth taking place in health facility	76%	40%
Antenatal care provided	71%	54.60%
Fecundity rate	4.8	7.4

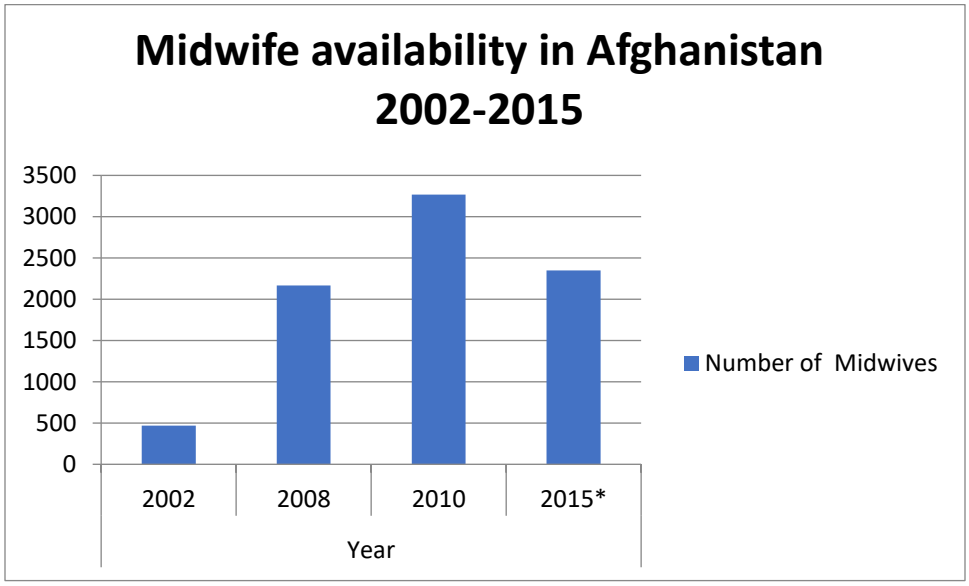
Source: Afghanistan demographic and health survey, 2015, key indicators, by USAID (pg. 10)

Despite the advances towards ending preventable maternal and child deaths, coverage of and access to midwifery services in rural communities in particular remains a challenge. There is still a severe shortage of qualified midwives throughout Afghanistan as table 4 and figure 3 show below.

Table 4: Midwife availability in Afghanistan 2002-2015

	Year			
	2002	2008	2010	2015
Midwives	467	2, 167	3, 268	2, 349

Figure 3



Source: http://afghanistan.unfpa.org/publications/state-afghanistans-midwifery-2014

** According to a donor report the number of midwifery schools in Afghanistan dropped from 32 to 22 between 2010 and 2013 due to a lack of funding, which could explain the drop in midwife availability shown above. The same report did say that by 2018 the number of schools should have risen back up to 31 by 2018 (State of Afghanistan's Midwifery 2014, UNFPA, WHO, USAID)*[4]

The most recent figures from the Ministry of Public Health state that in 2017 Afghanistan had 3,543 trained midwives. According to the 2016-2020 MoPH Health Strategy the total number of midwives needed is 8,230.

[4] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4136668/

That leaves a huge gap in provision totaling 4,687 midwives[5]. A number of challenges remain to be addressed if midwifery services are to be further improved. These include:

- Low quality of care and high cost of available care;
- Long distance to health facilities and women's restricted mobility;
- Lack of female providers in rural areas;
- Low level of literacy among women and limited male involvement in women's health;
- Lack of specific youth friendly services to meet the needs of adolescents and young adults in current national health care packages;
- Under-skilled midwives;
- Inadequate provision of fully functional state-funded services leading to an over-reliance on high cost privately funded services. 57% of Afghans seek care from the private healthcare sector. Many Afghans also seek care outside of the country in Pakistan and India.

Investment in midwifery is crucial for the improvement of maternal health in Afghanistan. Increasing the number of births attended by skilled health personnel, ideally midwives, is central to the achievement of the United Nations Sustainable Development Goal 3 on "Health and Well Being"[6].

THE PROJECT

Within the context of improving yet still insufficient maternal healthcare provision as outlined above, Action for Development (AfD) in collaboration with Midwifery School of Geneva designed and developed a short term capacity building training course for qualified midwives in Afghanistan. The course provided two weeks of comprehensive training for midwives in order to top-up their 18 month basic training and maximize their operational ability so that they can improve the provision of essential health care services to mothers in rural areas. The training consists of 5 principal modules (Care of the newborn, Eclampsia, Pre-eclampsia, Management of the 3rd stage of labor and, Post-Partum Hemorrhage). AfD has been significantly contributing to the professional training of certified midwives in rural areas of the country over the past 4 years. The participants were selected from certified midwives who are working in the Basic and Comprehensive Health Centre's in some of the most remote areas of the provinces. The provincial public health directorate assisted AfD staff in selecting the midwives.

The development and implementation of the capacity building training course for midwives was funded by the Canton of Geneva, FSF, City of Geneva, and Services Industrials de Genève (SIG). The curriculum, lesson plans and assessment tools have been developed with the technical support of consultants from Midwifery School of Geneva and translated into local languages in Afghanistan.

[5] *Health Strategy 2016-2020 MoPH p.g 40 http://extwprlegs1.fao.org/docs/pdf/afg168613.pdf*

[6] http://www.un.org/sustainabledevelopment/health/

Since start of the programme in 2014, 232 certified midwives have received capacity building midwifery training in 5 provinces of Afghanistan: Kabul, Bamyan, Herat, Parwan and Kapisa. Positive feedback from the participants in the project has reinforced AfD's intention to continue the two week capacity building training course in Midwifery for another 3 years. This second phase of the project will be informed by the results of this evaluation.

The overall objective was to reduce the maternal and infant mortality rates in the rural areas of Afghanistan through improving the skills and competence of the midwives. The specific objectives were as follows:

- Increase the proportion of pregnant women who receive ante-natal care;

- Increase the proportion of births attended by qualified midwives;

- Expand the use of family planning services;

- Improve the management and treatment of the most common complications during pregnancy and birth;

- Increase the demand for care through community outreach.

THE EVALUATION

The purpose of this evaluation is to identify the strengths and weaknesses of the first phase of the project in order to inform the second phase and thereby further improve the provision of maternal healthcare by qualified and practicing midwives in Afghanistan. The specific tasks can be grouped into five categories of evaluation: the achievement of specific project objectives, participant satisfaction, effectiveness of the course, learning for the future and project management. The evaluation tasks are as follows:

Achievement of Objectives

1. To determine the extent to which the overall and specific capacity building training course objectives were achieved;

Participant Satisfaction

2. To ascertain the participants' satisfaction with the training in the context of career development;

3. To ascertain from the midwifery master trainers how competent and confident they were in teaching within the curriculum;

4. To learn from the midwives whether or not they were successful in practicing their newly enhanced skills in the field;

Effectiveness of the course and its implementation

5. To assess the quality and effectiveness of the capacity building training course (curriculum, lesson plans, duration, certification, and training sites);

6. To assess the cost-effectiveness of the project;

Learning for the Future

7. To determine what aspects of the current training project should be continued beyond 2017;

8. To identify elements of the project that could be replicated and/or scaled-up elsewhere;

9. To ascertain if there are elements missing from the training project that should be added for the future;

10. To identify any risks to the future of the training project;

11. To highlight any negative aspects of the project to be avoided in the future.

Project Management

There are also some supplementary internal evaluation tasks to be informed by AfD staff responsible for the design, implementation and monitoring of the project:

1. To identify how well the project predicted and responded to risks;
2. To ascertain whether or not the project budget was sufficient - any under or over-spends?
3. To decide how the project activities be sustained now that this 3 year cycle has come to an end;
4. To determine the effectiveness of the monitoring, supervision and reporting system of the training course;
5. To ascertain if the project contributed to AfD's own organizational development goals

METHODOLOGY OVERVIEW

Study Design and Rationale

A number of data collection methods were used to describe and assess the project. The data collection was carried out on three levels:

a) Health facility level
b) Health directorate level
c) Patient level

Qualitative Data Collection

a. Interviews with trained midwives working in the health facility settings who received the training sessions by AfD. This was done to capture their perceptions of the quality of the training they received, the benefits they saw in utilizing new skills, the impact they had on maternal and newborn heath and recommendations for improving the in-work training project.

b. Interviews with Key Informants including Directors of Ministry of Public Health offices in the provinces and midwifery program trainers (qualified doctors) to obtain their perspectives on the strengths and weaknesses of the project and their recommendations for improvement

c. Focus Group Discussions in order to collect perceptions of the quality of services being provided by the midwives to the mothers and newborns.

Quantitative Data Collection

Statistics from the health care facilities and the Ministry of Public Health to see if there have been actual tangible improvements in maternal and infant health indicators in the areas where the training course has been rolled-out. These include: home deliveries and total institutional deliveries, neonatal and maternal mortality ratios, antenatal and postnatal visits, pregnancy-related visits, family planning consultations, visits by women of child-bearing age, complex cases and the numbers staff and midwives and the percentage of whom are female.

Sampling Plan

The study population for this evaluation consists of 4 groups:

1) A selection of 21 **Midwives** who received training by AfD during the past 4 years (This represents 10% of the total number trained. These midwives included graduates from Institute of Health Sciences (HIS) Kabul, as well as those graduated from Community Midwifery Education (CME) schools. The midwives were selected on the basis of their being active midwives in one of the health facilities. The selection was random and largely dependent on which midwives AfD were able to make contact with. However, through using random selection it was hoped that the midwives chosen would have a range of years of experience (to gain a mixture of newly qualified and more experienced midwives) and include midwives close to and far from the center of the province (health facilities tend to be worse in more remote areas).

2) **Master Trainers** – qualified doctors from each of the 5 provinces who delivered the training to the midwives

3) A **Focus Group** of the beneficiaries (pregnant women from the communities) who received health services from the midwives. In each province, one focus group was conducted with the patients visiting the health facility. It was hoped that the focus group participants would be comprised of both those patients who were direct clients of the selected midwives and those who were not.

4) **Ministry of Public Health Officials** from each of the 5 provinces who should have sufficient knowledge to provide information about the condition of maternal health services in the rural areas.

EVALUATION RESULTS, IMPACT AND LEARNING

Qualitative Data

The responses to the questionnaires (see Annex 1) were analyzed for each of the 4 study populations. This analysis is presented below with the following evaluation questions in mind:

Achievement of Objectives

1. Was the overall project objective achieved?

2. Were the specific project objectives achieved?

Participant Satisfaction

3. Were the participants satisfied with the training in the context of career development?

4. How competent and confident were the Master Trainers in teaching within the curriculum?

5. Were the midwives successful in practicing their newly enhanced skills in the field?

Effectiveness of the course and its implementation

6. Was the quality of the capacity building training course (curriculum, lesson plans, duration, certification, and training sites) sufficient?

7. Was the project cost-effective?

Learning for the Future

8. What aspects of the current training project should be continued beyond 2017?

9. Are there elements of the project that could be replicated and/or scaled-up elsewhere?

10. Are there elements missing from the training project that should be added for the future?

11. What are the risks to the future of the training project?

12. Are there any negative aspects of the project to be avoided in the future?

Midwives

The study population covered by the survey consists of 21 certified midwives based in 5 different provinces (Kabul, Herat, Parwan, Kapisa and Bamyan). The analysis of responses has shown that 100% of midwives participating in the 2 week-training affirm that the training has allowed them to better handle pregnancy, deliveries, newborn care and related complications. In addition, the midwives also mentioned the provision of care, establishment of diagnosis and establishment of anamnesis. See Fig.4 and Table 5 below.

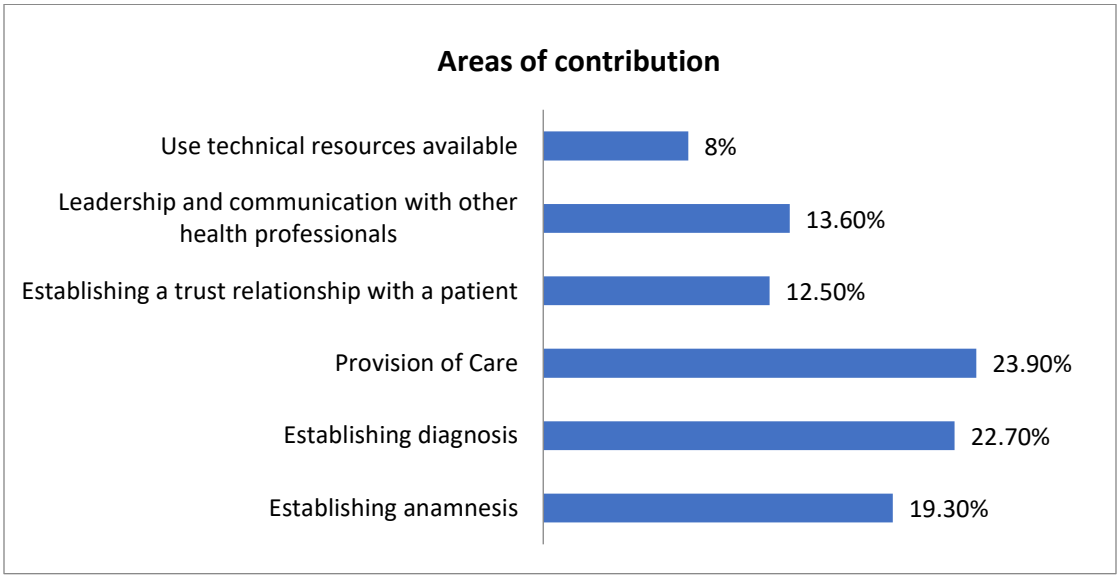


Figure 4. Areas of contribution of the midwife training. Calculated according to the total number of answers

Areas of the training	Establishing anamnesis	Establishing diagnosis	Provision of Care	Establishing a trust relationship with a patient	Leadership and communication with other health professionals	Use technical resources available
Midwives (%)	81%	95%	100%	52%	57%	33%

Table 5. Areas of contribution of the midwife training. Calculated according to the total number of midwives (21).

All midwives confirm that the offered training efficiently filled previous numerous knowledge gaps and stated that they would participate in more such trainings. 100% of participating midwives also noticed that the training increased their professional confidence. In 100% of studied cases managers noticed positive changes in the capacity of midwives to care for patients autonomously.

Among the midwives taking part in the survey, 14% come from Kabul, 24% from Kapisa, 24% from Parwan, 19% from Herat and 19% from Bamyan. For example the midwives from Kabul attended on average 7 successful deliveries in the last month before taking the survey. The average of total deliveries they attended last year was 44. For all statistics on average attended deliveries for each province see Table 6.

Province	Average Successful Deliveries (attended last month)	Average Deliveries (attended last year)
Kabul	7	44
Kapisa	11	74
Parwan*	44	551
Herat	9	33
Bamyan	13	63

Table 6. Average delivery attendance by province one month preceding the survey and in the last year. *when calculating average values for the province of Parwan, one set of values for one midwife had to be removed due to its incoherence.

Almost all midwives confirm that they face numerous challenges during deliveries. The most common are: PPH (34% of all challenges mentioned), Pre-eclampsia (20%) and Eclampsia (20%), Less common were Placenta Abnormalities (8%) and Breech Deliveries (8%). For further results see Fig. 5. To resolve these challenges,

midwives suggest solutions which are directed towards the improvement of their professional skills mainly through more training sessions such as this particular one provided by AfD.

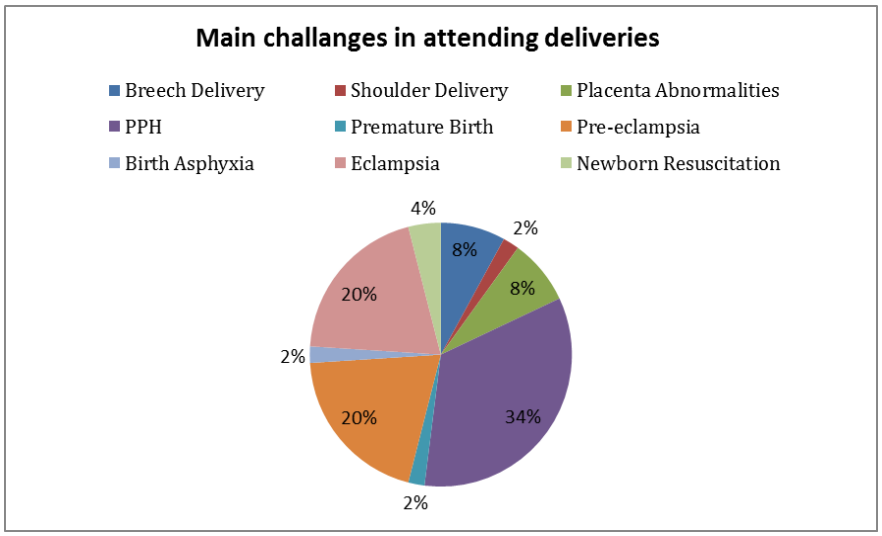


Figure 5

The numbers of cases of maternal and neonatal mortality were not provided in the answers based on the fact that all complicated cases are referred to larger better equipped medical centers.

Following the completion of the training, on average 1 midwife is able to train another 5 midwives. All participating midwives affirmed that they discuss the topics with their fellow colleagues, with 72% of them spending more than 3 hours per week on teaching. See Fig. 6

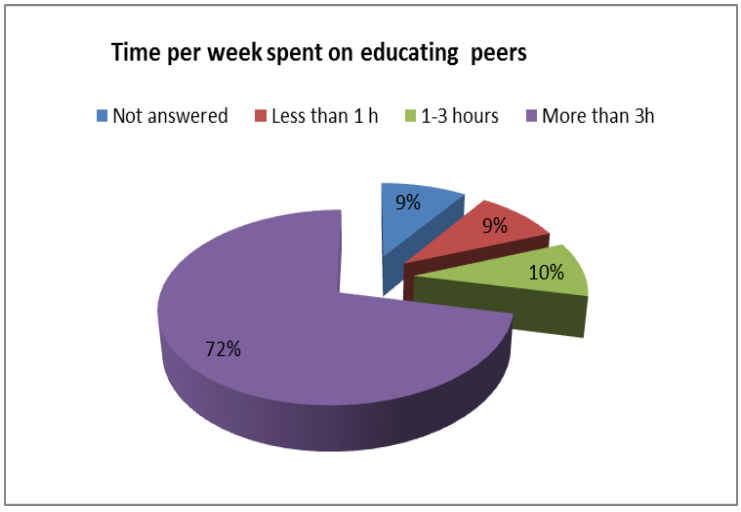


Figure 6

Concerning the sufficiency of training and methodology received to train other midwives, 76% of participants characterized it as very good, 14%- absolutely sufficient, 5% more or less sufficient and 5% said it was not at all sufficient. Recommendations to improve the training "in cascade" were given by 71% of midwives and suggested updating regularly the subjects with new topics and practical techniques, extending the time of training, conduction of practical sessions in large better equipped facilities, and emphasizing the need for proficient trainers. There were no suggestions from another 10% of trained midwives and 19% didn't leave an answer.

The major skills acquired or/and strengthened during the training were in accordance with 4 out of 5 main modules of training set by AfD (PPH, Pre-eclampsia, Eclampsia, Neonatal Care). They are also the same conditions or risk factors contributing to high maternal and neonatal mortality rates in Afghanistan till today. For example, the management of Post-partum Hemorrhage (PPH) was the major skill acquired during the training, which consisted 22% of all other skills. Pre-eclampsia was a second major skill that was improved (18%) shared with the management of Eclampsia (also 18%). For more information see Fig. 7

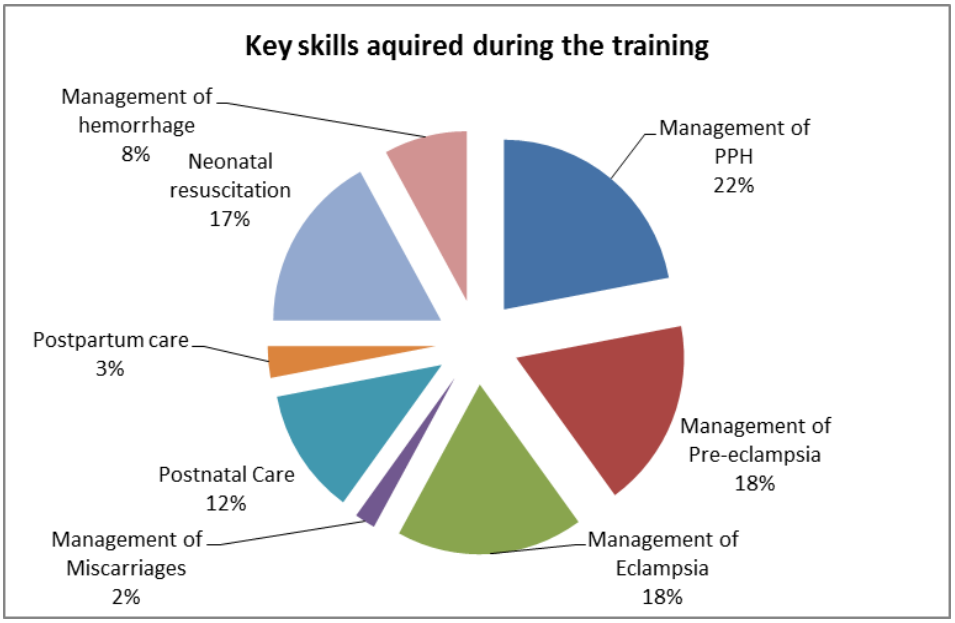


Figure 7. Skills acquired during the training. Calculated according to the total number of answers (59).

In other words, 62% of midwives considered management of PPH as the key skill they developed during the training, while 52% chose Pre-eclampsia, and 48% said it was Neonatal Resuscitation the skill they strengthened the most.

Skills	Management of PPH	Management of Pre-eclampsia	Management of Eclampsia	Management of Miscarriages	Postnatal Care	Postpartum care	Neonatal resuscitation	Management of hemorrhage
% of midwives	62%	52%	52%	5%	33%	9%	48%	24%

Table 7. The key kills developed/strengthened by midwives. Calculated according to the total number of midwives (21).

48% of participating midwives thought that the materials and modules used in training were good, and 52% characterized them as very good. In general the topics were found to be up to date and in accordance with real life cases, well organized and efficiently presented. All midwives receiving the training stated that they are better able to convince patients to receive pre- and post-natal care. The main 3 benefits the midwives have seen in the training are concerned with the improvement of technical skills, increase in theoretical knowledge and in feeling more comfortable performing different manipulations. See figure 8.

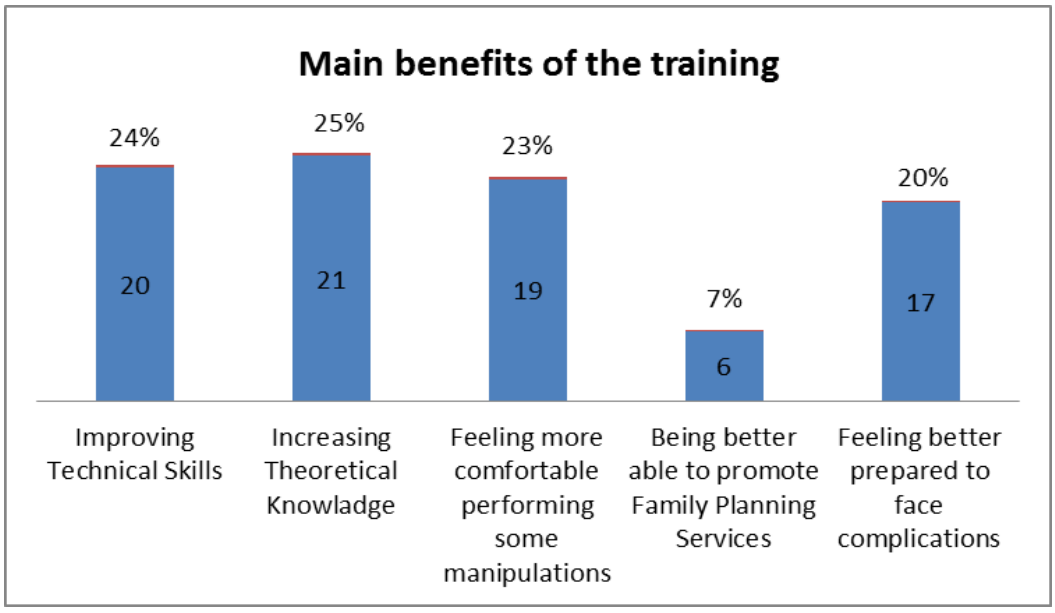


Figure 8

All midwives except one (didn't leave an answer) confirm that the training was well adapted to the reality of their work, particularly in the aspects of team capacity and cases treated.

In case further training was offered, midwives suggested the following topics to be added to the curriculum (listed in the order of significance):

- Treatment of severe PPH
- Nutrition
- Severe Pre-eclampsia and Eclampsia
- Manual Vacuum Aspiration (MVA)
- Emergency Obstetrics Care (EOC)
- Family Planning
- Postnatal Care
- Episiotomy
- Blood Transfusion
- Diseases during pregnancy
- Placenta abnormalities

The survey results revealed two potential risk factors to the future success of the project. 1) An increase in budget will be needed to roll out the recommended improvements, 2) Under-investment in healthcare, which means that in some cases heath facilities in rural areas were in poor condition and perhaps not good enough for the practical training sessions.

The overall feedback from midwives regarding the training is very positive. All midwives participating in the training affirm that they would like to remain working in the field and continue improving their theoretical knowledge and practical skills. They request more of this kind of training organized by AfD and suggest an increase in the duration of practical sessions and that they are held in well-equipped medical center's/ large maternity hospitals.

The cascade training offered by AfD proved to be cost-effective, extremely useful and efficient. The expansion of knowledge, improvement of crucial skills and the increase in the number of skilled birth attendants are all important building blocks in Afghanistan's quest to achieve improved maternal and infant care, decreased mortality rates and an enhancement of the nation's overall well-being. See Fig. 9.

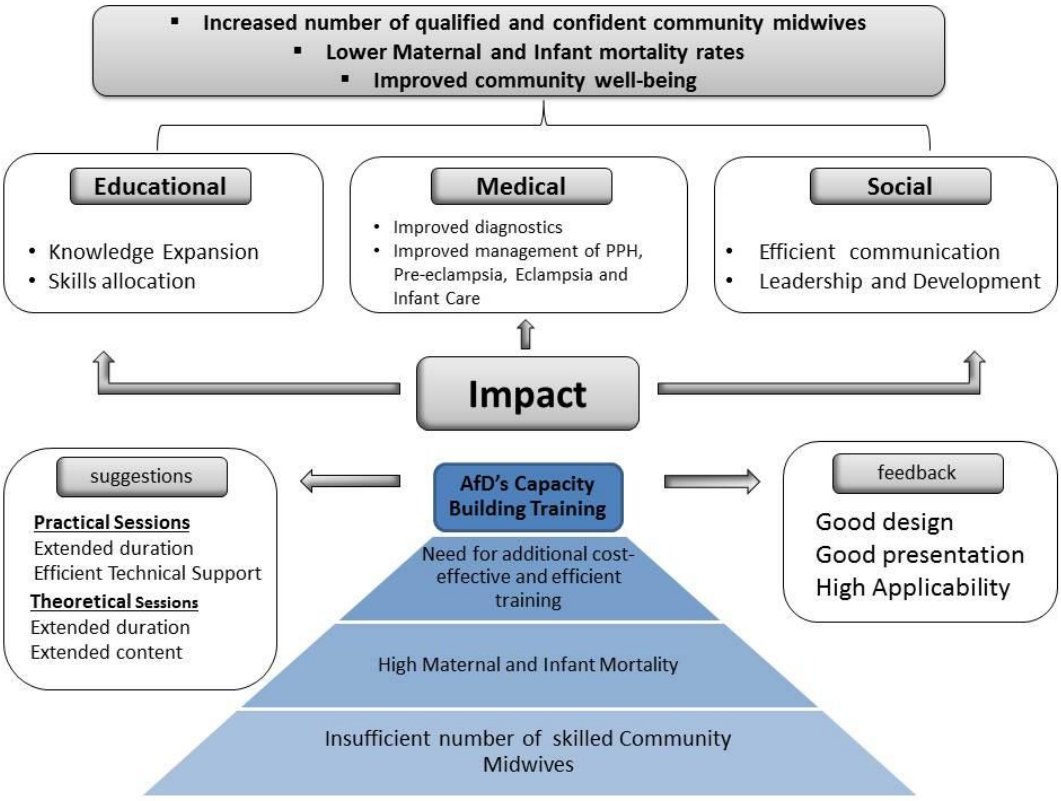


Figure 9: Summary

MASTER TRAINERS

Three master trainers responded to the questionnaires. They are Dr Bobany (female) from Bamyan province and Dr. Zabi (male) and Dr Qudsia from Kabul. They all provided very detailed responses to most of the questions. They all gave very similar positive responses regarding the quality of materials and modules, the main skills developed, the main benefits for the community and recommendations for additions and improvements. This suggests a comprehensive training programme that has been uniformly rolled-out with consistent positive results across different geographical locations. The responses from the master trainers overwhelmingly suggest the successful achievement of the aim of the training project: a reduction in maternal and infant mortality rates in the rural areas of Afghanistan through improving the skills and competence of midwives.

All three master trainers felt they were sufficiently involved in the design and implementation of the training. The trainers from Kabul (Dr. Zabi) and Bamyan agreed that the trained midwives are able to assume responsibility for their clinical decisions and actions (no reply Dr. Qudsia). They each gave an example of a

trained midwife who now runs a midwifery unit in a local hospital. All three master trainers recommended replicating the training in other regions and covering a greater range of topics. They all agreed that the training was cost-effective, particularly in comparison with official government providers.

In terms of the suitability of the training to the workplace reality of the midwives, all the trainers felt that mostly it was well-adapted. However, two of the master trainers said that there are some heath facilities that lacked the necessary equipment and medication and had poor infrastructure and insufficient staff capacity.

The master trainers all gave a positive review of the training methodology they received and followed. The trainers recommended an increase in budget to provide for follow-up training. One trainer from Kabul (Dr. Zabi) also recommended the "cascade" method of trained midwives then becoming trainers themselves.

All three trainers thought the training materials and modules were clear, relevant, useful and interesting. They all recommended increasing the duration of the training – the practical side in particular for the trainer from Dr. Qudsia and both practical and theoretical aspects for Dr. Zabi (both Kabul). Dr. Zabi also recommended adding in an electronic module.

The trainers all felt the training has allowed the midwives to better handle cases of pregnancies, deliveries, newborn care and related complications by an improvement in knowledge and skills in the following areas:

- Diagnosis and treatment of eclampsia and preeclampsia including the administration of magnesium sulphate;
- Management of Post-Partem Haemorrhage (PPH);
- Pregnancy complications like early hemorrhage and diagnosis and treatment of shock;
- Management of abortions;
- Neonatal care including newborn resuscitation, reading and understanding the APGAR score, recording newborn vital indicators, diagnosis and treatment of hypoglycemia, hypothermia and hypophrenia, routine neonatal care.

From these areas the main skills the trainers felt the midwives had developed through the training were:

- Diagnosis and treatment of eclampsia and preeclampsia;
- Management of PPH ;
- Pregnancy complications like early hemorrhage and diagnosis and treatment of shock;
- Neonatal care including newborn resuscitation and diagnosis and treatment of hypoglycemia.

All the trainers felt that these areas covered by the training were the most relevant to the midwives' working reality. In the future they would like the following topics to be added:

- MVA; Vacuum Extraction; IP; TB; Malaria; HIV; HBS; HCV; Pregnancy and infectious diseases and Nutrition.

The trainers described the main benefits for the community resulting from the training as:

- A reduction in maternal and infant mortality;
- An increase in community confidence and trust in the midwives;
- A community that is more informed about pregnancy complications;
- An increase in the professionalism and confidence of midwives.

Together the master trainers made the following recommendations for the future:

- New subjects should be included in the training as detailed above;
- The duration of the training should be increased and post-training follow up should be conducted;
- Midwives should be carefully selected (2 of the trainers from Bamyan and Kabul suggested than an AfD representative should be involved in this process. They don't explicitly state that there has been a problem with the selection process but it is interesting that they bring this up as a recommendation. It does suggest that the inappropriate selection of midwives could be a risk factor to the success of the project.);
- An increase in budget (Dr. Zabi only);
- Logistical supplies should be carefully estimated

The survey results revealed three risk potential factors to the future success of the project. 1) Under-investment in healthcare, which means that in some cases heath facilities lacked the necessary equipment and medication, infrastructure and staff capacity for the trainers to carry out the training in the best possible way. 2) A possible issue with the selection of midwives for the training. The project administrators should take care to ensure that the right midwives are chosen to continue the training "in cascade". 3) An increase in budget will be needed to roll out the recommended improvements.

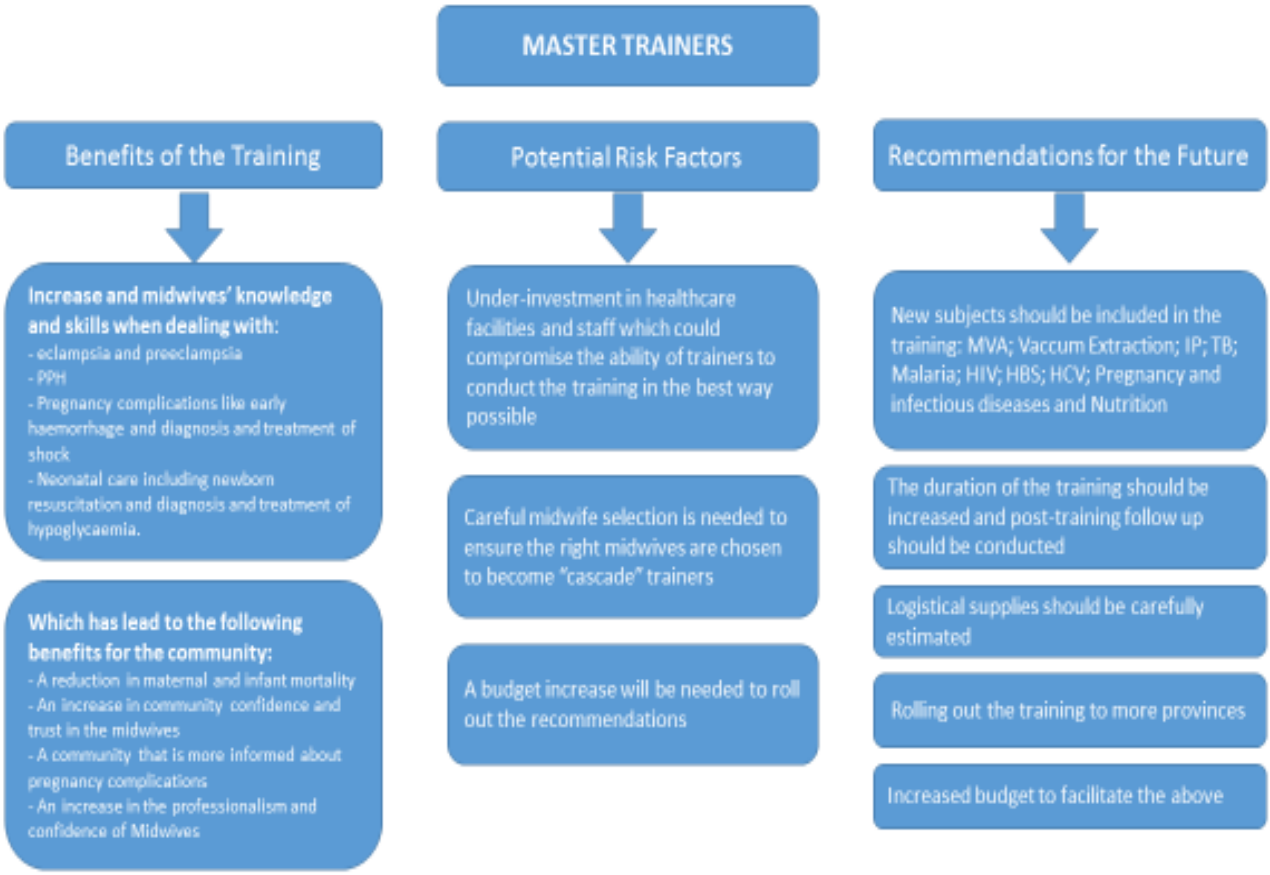


Figure 10

MINISTRY OF PUBLIC HEALTH OFFICIALS

Four Directors of Ministry of Public Health regional offices responded to the questionnaire from the provinces of Herat, Parwan and Kapisa. The feedback on the training programme was resoundingly positive. Taken together the responses suggest the successful achievement of the aim of the training project: a reduction in maternal and infant mortality rates in the rural areas of Afghanistan through improving the skills and competence of midwives. Whilst the responses were positive, their content was limited. Out of a total of 9 questions only 3 were answered by each representative with any level of detail. 5 out of the 9 questions contained single word responses. Each representative omitted to answer at least one of the questions.

All four Ministry of Health representatives felt able to evaluate the positive effects of the midwife training project based on the statistics from their health centres. They all felt they were sufficiently involved in the

design and implementation of the training. They all agreed that the trained midwives are able to assume responsibility for their clinical decisions and actions and that these midwives acted in accordance with professional values and ethics. All four representatives recommended replicating the training in other regions and covering a greater range of topics. This information comes from simple "yes" responses to 5 questions with no further detail provided.

The representative from Kabul endorsed the partnership with the Swiss University, highlighting the good quality of material provided, the transfer of knowledge to the midwives and the resulting decrease in maternal mortality. The other 3 representatives did not answer this question.

All 4 representatives were very positive about the content of the training provided by the AfD project. The representatives from Herat and Parwan provinces said that the training the midwives received enhanced their official training through learning "on the job" whilst dealing with real situations. The representatives from Kapisa and Kabul felt this enhancement was achieved by an increase in knowledge and expansion of the range of the midwives' skills.

Taking the responses from the representatives from Parwan, Kapisa and Kabul together the key benefits from the training were as follows (The representative from Herat did not answer):

- An increase in the knowledge and capacity of the midwives;
- An increase in the interaction between midwives which has facilitated an increase in the sharing of knowledge and experience;
- An improvement in the trust local people have in their community healthcare providers;
- An improvement in the prevention of complications during pregnancy and childbirth;
- An reduction in newborn mortality;
- A reduction in maternal mortality.

Recommendations to improve the training in the future were provided by the representatives from Herat, Parwan and Kapisa and include the following (The representative from Kabul did not answer):

- An increase in the duration and frequency of the training;
- An expansion of the number of topics covered by the training;
- Rolling out the training to more provinces;
- An increase in the number of partners in order to increase funding.

The survey results revealed one potential risk factor to the future success of the project: an increase in budget will be needed to roll out the recommended improvements.

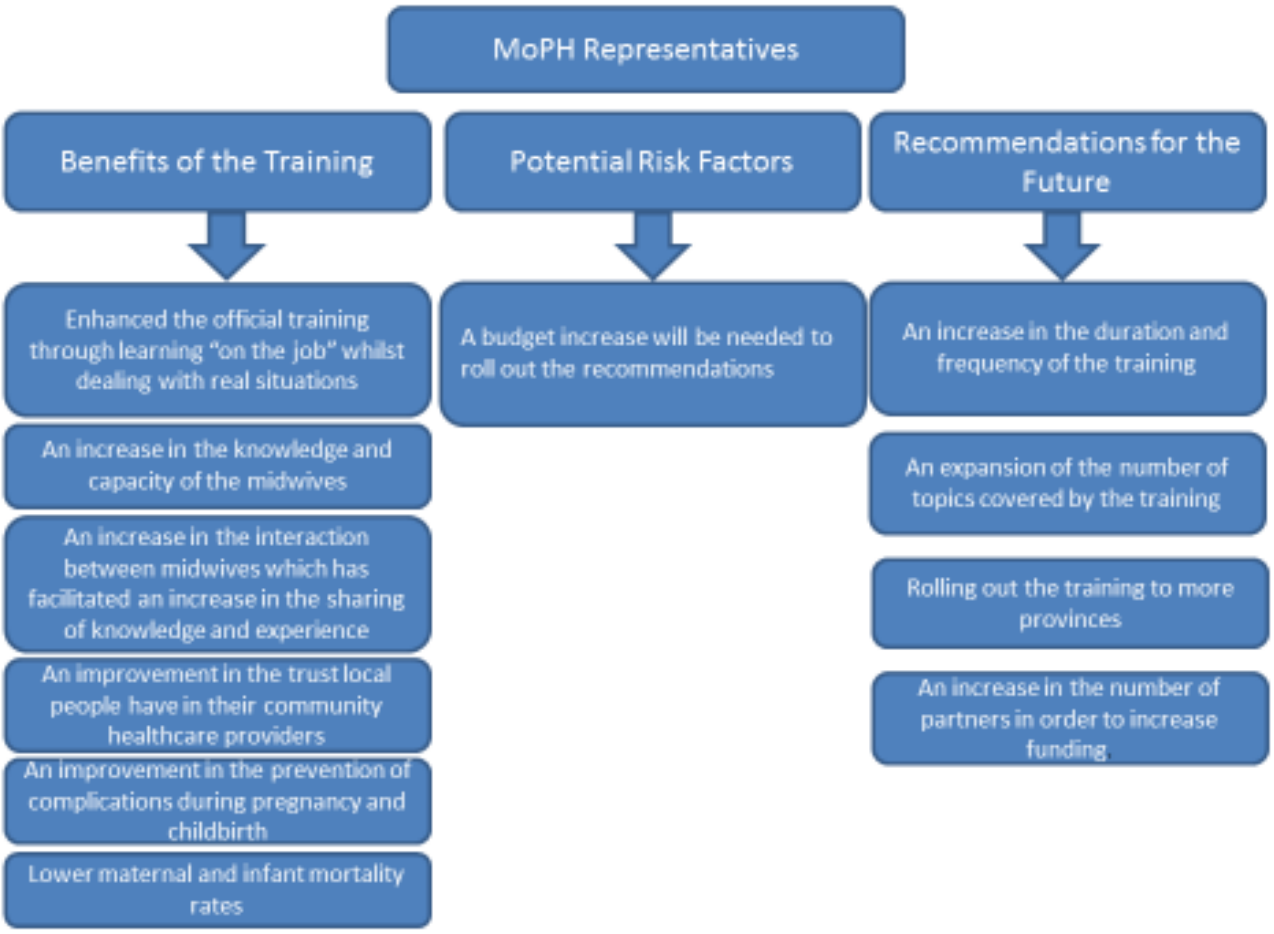


Figure 11

FOCUS GROUP REPRESENTATIVES

Five focus group representatives responded to the questionnaire. One from Herat province, two from Parwan, one from Kapisa and one from Kabul. The focus group representatives from Parwan answered 8 of the 11 questions, the representatives from Herat and Kapisa answered 9 and the representative from Kabul answered 10 questions. The responses to the survey questions were mostly positive regarding the capacity and skills of the trained midwives. However because of the missing responses, the lack of detail in others, a poorly phrased question and sometimes an apparent misinterpretation of the questions, the data is not as informative as it could have been.

All five focus group representatives had visited the midwife at the health Centre at least twice, three of them 6 times or more including 10 visits by one representative from Parwan and from Kapisa. This suggests that they have been satisfied enough with the care they received to keep coming back. Unfortunately, we don't know over what period of time these visits took place or if they were in relation to a single pregnancy or for multiple pregnancies over a period of years.

All respondents were satisfied that the midwife acted consistently in accordance with professional ethics and values. However, it seems likely that at least 3 representatives misunderstood the question because when asked to gives examples (only the representatives from Herat, Parwan and Kabul did so) they said "satisfied with the consultation but unsatisfied with the waiting time", "satisfied with onsite care, wasn't referred to another Centre" and "treated for anemia". These examples are more to do with the care received generally and not professional ethics and values.

All of the focus group representatives said that the midwife was able to provide care to the mother and newborn during and after delivery but these were single word answers so no further detail was provided.

The responses to the question about the midwife taking time to educate and advise on sexuality and family planning suggest that this is a service that is still lacking. One representative from Parwan did not reply. The representative from Herat said there was not time for this due to a high workload experienced by the midwife. The representatives from Parwan and Kapisa both said they did receive this advice but the examples they gave were not actually related to family planning and sexuality. The representative form Parwan said there was an emphasis on breastfeeding and the representative from Kapisa that there was an improvement in the administration of the serum. Only the representative from Kabul gave a clear positive response to this question. They said they were advised on family planning and other aspects of sexual life. It could be that the midwives don't have time to provide information on family planning – as the representative from Herat says - or it could be that they don't yet have sufficient knowledge in this area to feel confident to give the advice.

Four of the five representatives (no reply from one of the Parwan representatives) said that they have noticed changes in the midwives performance since they received their training. Unfortunately, the question does not ask if these changes have been positive so the answers don't really tell us anything.

Unfortunately the questions about giving concrete examples of the increased capacity of the midwives and whether or not having a better trained midwife at the health facility makes it more likely they will visit were only answered by the representative from Kabul. She said that yes, having a trained midwife did make it more likely that she would visit and that her labor was well-attended and went very well. However, this example isn't really informative regarding the improved capacity of the midwife because we don't know if she did

better during this birth than any others prior to receiving the training.

Together the focus groups representatives made the following recommendations for future midwife training:

- Improve the medical ethics aspects of the training;
- Improve and increase the general knowledge of the midwives;
- Improve the skills of all medical staff not just midwives;
- Improve the medical facilities in existing health centers.

The survey results revealed three potential risk factors to the future success of the project. 1) Under-investment in healthcare which means that in some cases health center's lack the facilities the midwives require to operate effectively. 2) A shortage of midwives generally which means that those who are practicing have a heavy work load and sometimes not enough time to cover subjects beyond immediate care e.g. family planning advice. 3) An increase in budget will be needed to roll out the recommended improvements.

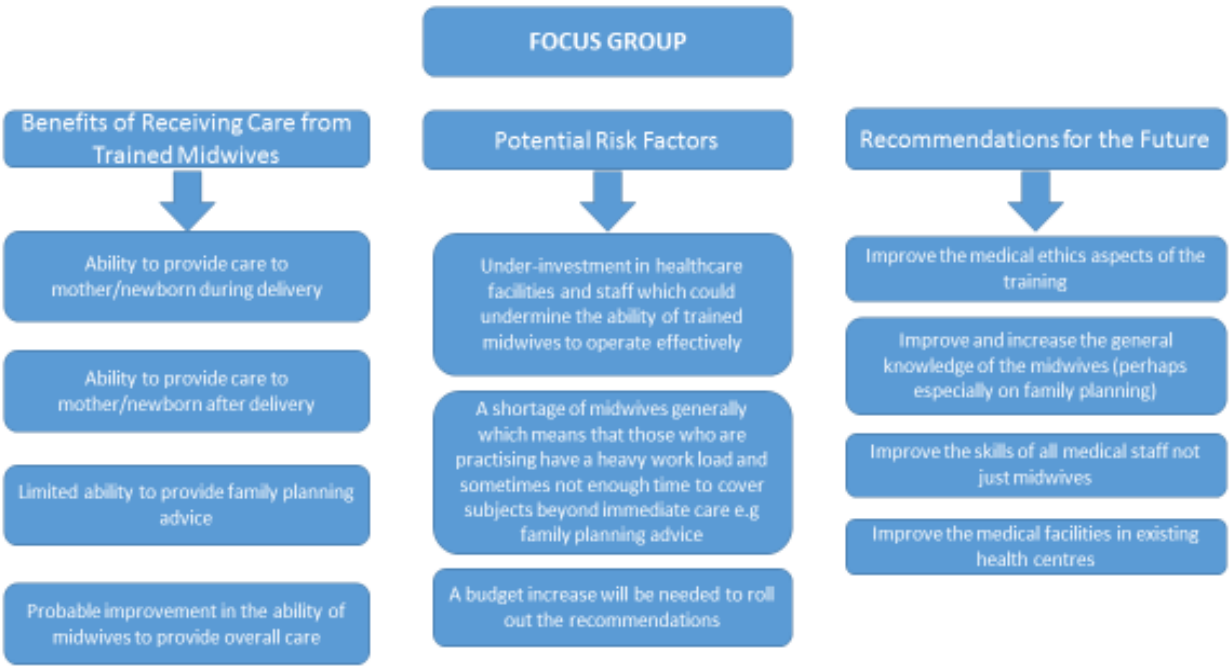


Figure 12

QUANTITATIVE DATA

The Ministry of Public Health provided statistical data from all the health center's in the 5 provinces included in the midwifery training project. This data was analyzed within evaluation category one to see if the overall project objectives of reducing infant and maternal mortality rates in rural Afghanistan and the specific project objectives[7] were achieved.

The data was first of all analyzed in totality to gain an overview of the changes in the care received by pregnant women and newborns between 2013 and 2016 across all health center's in all 5 provinces. After this the data for the health facilities where AfD trained midwives were operating was separated out in order to examine specifically the care received in these facilities alone.

It was planned that a comparison would then be made between health facilities with AfD trained midwives and those without to see which performed best. However, it soon became clear that such a direct comparison would not be informative as to the success of the midwifery training project. There are too many external variables to enable a like for like comparison. Health facilities differ too much in terms of location, infrastructure, overall staff capacity, medical supplies and equipment and numbers of complex cases. For example, an AfD trained midwife in a small rural health facility far from the Centre of the province with poor medical supplies, few colleagues and a complex case load may not be able to provide the same quality of care as a midwife who hasn't received the supplementary training but operates in a large, fully equipped health facility close to the Centre of the province with a full complement of well-trained colleagues. An attempt to compare health facilities of similar sizes in similar locations with a similar number of staff still could not take account of differences in infrastructure, medical supplies and equipment. One small rural health facility may be basic but fully functional, another may not even have a delivery table or a roof that will last the winter. In short it is impossible to compare facilities without knowing the exact reality of each one and this was not possible to achieve. For this reason the comparison was not made for the purposes of this evaluation. That said, it could be of interest to AfD to take closer look at the standard of the health facilities where AfD trained midwives are operating to evaluate how their surroundings impact on their ability to carry out their work. This is an important context to the successful future of the midwifery training project.

OVERVIEW ALL PROVINCES 2013-2016

The 13 data sets from the health facilities that were analyzed include: home deliveries and total institutional deliveries, neonatal and maternal mortality ratios, antenatal and postnatal visits, pregnancy-related visits, family planning consultations, visits by women of child-bearing age, complex cases and the numbers staff and

[7] increase ante-natal care, increase births attended by qualified midwives, expand family planning services, improve treatment of most common complications and increase the demand for care

midwives and the percentage of whom are female. For the complete data sets and more detailed analysis see annexes 2 and 3.

HOME DELIVERIES AND TOTAL INSTITUTIONAL DELIVERIES

The number of home deliveries decreased in 4 of the 5 provinces from 2013 to 2016 (Bamyan, Herat, Kabul and Parwan).In Kapisa the number of home deliveries has increased from 2013 to 2016. As percentage decreases by province (increase for Kapisa) the figures are:

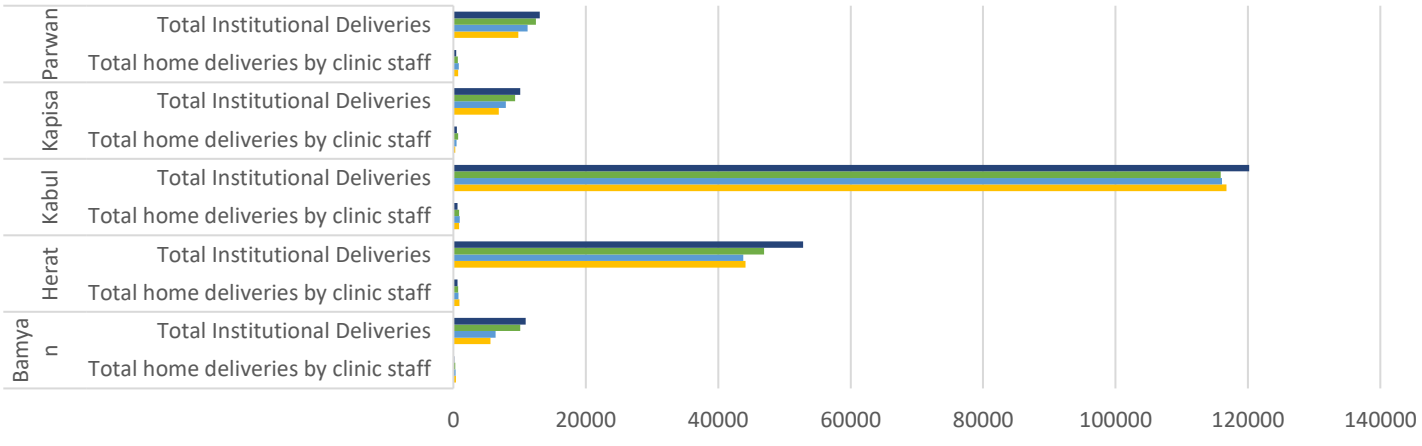
Bamyan – 62% decrease, ***Herat*** – 33% decrease, ***Kabul*** – 28% decrease, ***Kapisa*** – 82% increase,

Parwan – 41% decrease

The number of total institutional deliveries increased in all 5 provinces from 2013 to 2016. As percentage increases by province the figures are:

Bamyan – 94% increase, ***Herat*** – 20% increase, ***Kabul*** – 3% increase, ***Kapisa*** – 48% increase, ***Parwan*** – 33% increase

Figure 13. Home Deliveries and Total Institutional Deliveries for all Provinces from 2013 to 2016



	Bamyan		Herat		Kabul		Kapisa		Parwan	
	Total home deliveries by clinic staff	Total Institutional Deliveries	Total home deliveries by clinic staff	Total Institutional Deliveries	Total home deliveries by clinic staff	Total Institutional Deliveries	Total home deliveries by clinic staff	Total Institutional Deliveries	Total home deliveries by clinic staff	Total Institutional Deliveries
2016	142	10900	612	52829	626	120207	506	10090	436	13028
2015	264	10099	708	46934	844	115890	705	9306	658	12480
2014	327	6382	774	43792	952	116104	481	7937	815	11198
2013	371	5617	919	44112	864	116759	278	6838	735	9811

The general trend (with the exception of Kapisa) is for the number of home deliveries to reduce as the number of total institutional deliveries increases. This could be for a number of reasons including: an increase in the number of trained midwives operating in health facilities, an improvement in the confidence pregnant women have in the ability of these midwives to carry out deliveries safely, an overall increase in the number of births during this period and an improvement in the quality of the health facilities themselves, which means that there is less need for midwives to carry out home deliveries. The analysis of the survey data supports reasons one and two.

NEONATAL AND MATERNAL MORTALITY

The ratios for neonatal and maternal mortality[8] show no significant change and remain almost the same for 2013 and 2016. The constancy of these values should be considered alongside an increase in the number of complex cases during the same period (see below), which could in part account for a lack of improvement in these ratios.

Table 8. Ratio of Maternal Mortality

	2013	2014	2015	2016
Kapisa	0.7	0.7	0.7	0.7
Herat	0.7	0.7	0.7	0.7
Parwan	0	0.1	0.5	0.5
Kabul	1	1	1	1
Bamyan	1	1	1	1

Table 9. Ratio of Neonatal Mortality

	2013	2014	2015	2016
Kapisa	0.98	0.98	0.98	0.98
Herat	0.98	0.98	0.98	0.98
Parwan*	0.1	0.3	0.3	0.3
Kabul	1	1	1	1

[8] Ratio of neonatal mortality (No of neonatal death/No of total births attended in the health facility) (average value). Ratio of maternal mortality (No of mothers died/No of deliveries attended in the health facility) (average value)

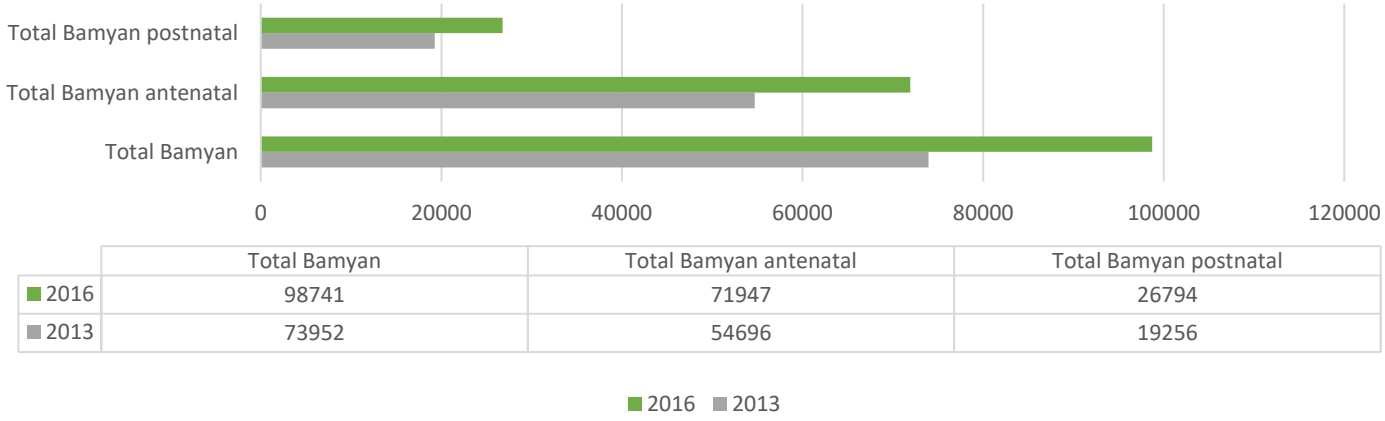
Bamyan	1	1	1	1

* Calculations for the province of Parwan were corrected due to large values which didn't seem consistent with the trend and appeared to represent real mortality numbers not ratios.

ANTENATAL AND POSTNATAL HEALTH FACILITY VISITS

In Bamyan province there was an increase in total antenatal and postnatal visits from 2013 to 2016. This represents a percentage increase of 32% and 39% respectively.

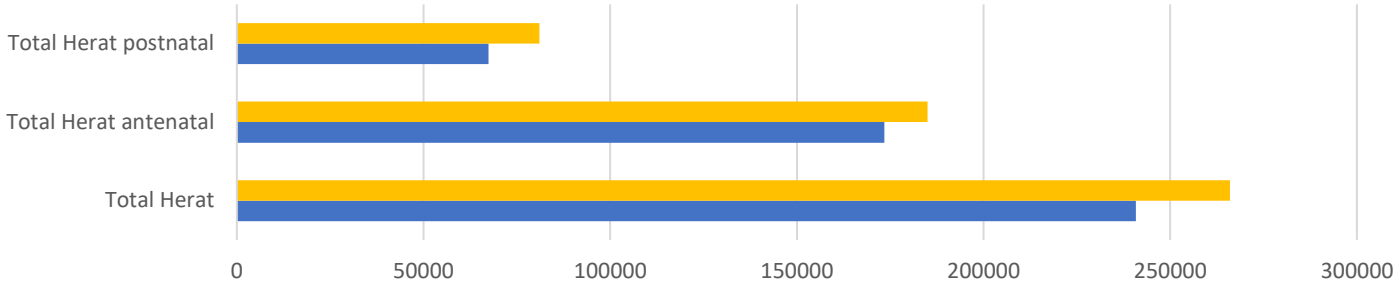
Figure 14. Bamyan Province: Health Facility Total Antenatal and Postnatal visits 2013 and 2016



	Total Bamyan	Total Bamyan antenatal	Total Bamyan postnatal
2016	98741	71947	26794
2013	73952	54696	19256

In Herat province there was an increase in total antenatal and postnatal visits from 2013 to 2016. This represents a percentage increase of 7% and 20% respectively.

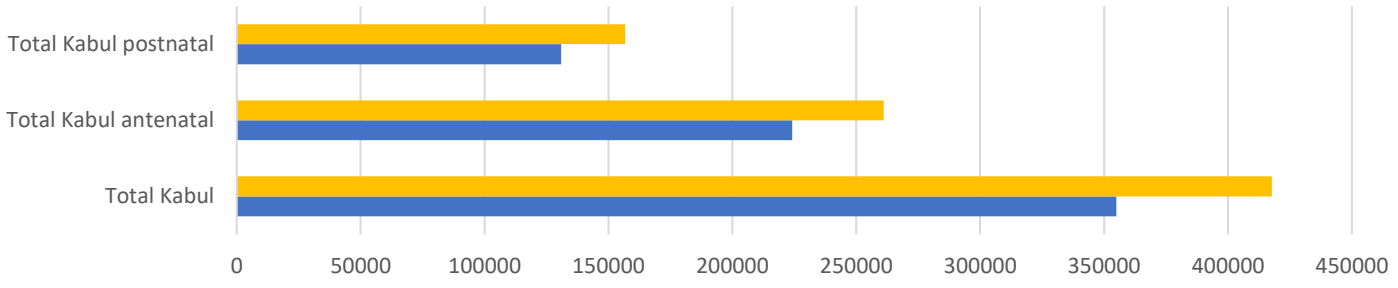
Figure 15. Herat Province: Health Facility Total Antenatal and Postnatal visits 2013 and 2016



	Total Herat	Total Herat antenatal	Total Herat postnatal
2016	266002	184971	81031
2013	240798	173425	67373

In Kabul province there was an increase in total antenatal and postnatal visits from 2013 to 2016. This represents a percentage increase of 16% and 20% respectively.

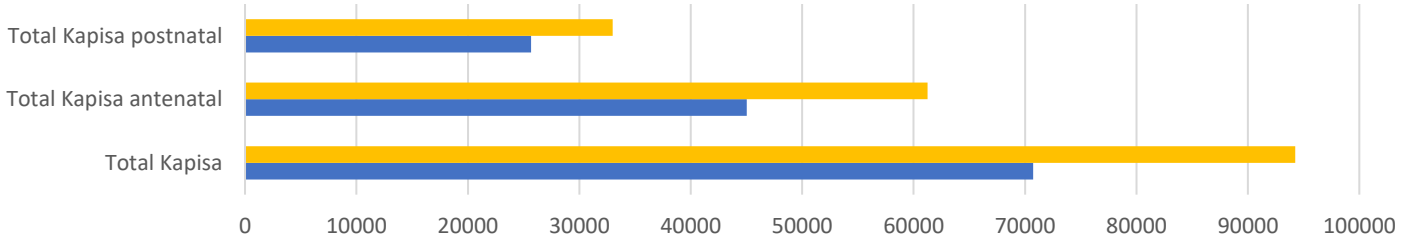
Figure 16. Kabul Province: Health Facility Total Antenatal and Postnatal visits 2013 and 2016



	Total Kabul	Total Kabul antenatal	Total Kabul postnatal
2016	417782	261086	156696
2013	354985	224133	130852

In Kapisa province there was an increase in total antenatal and postnatal visits from 2013 to 2016. This represents a percentage increase of 36% and 28% respectively.

Figure 17. Kapisa Province: Health Facility Total Antenatal and Postnatal visits 2013 and 2016

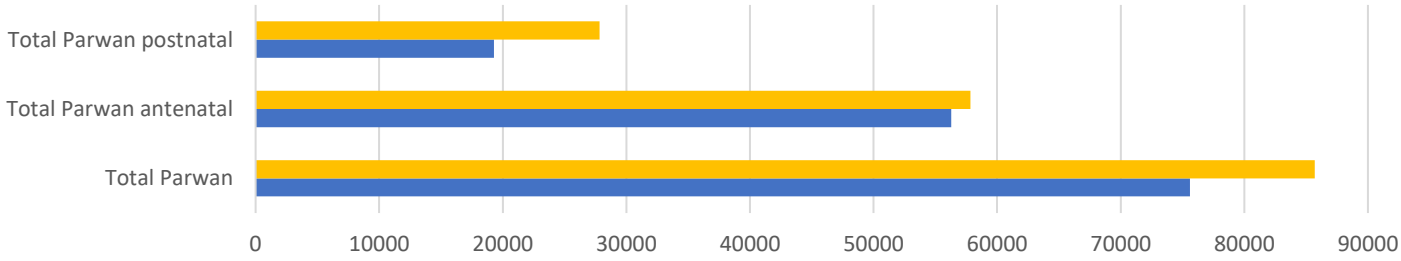


	Total Kapisa	Total Kapisa antenatal	Total Kapisa postnatal
2016	94240	61255	32985
2013	70723	45040	25683

2016 2013

In Parwan province there was a slight increase in total antenatal visits (1,548) and a more significant increase in postnatal visits (8,550) from 2013 to 2016. This represents a percentage increase of 3% and 44% respectively.

Figure 18. Parwan Province: Health Facility Total Antenatal and Postnatal visits 2013 and 2016



	Total Parwan	Total Parwan antenatal	Total Parwan postnatal
2016	85685	57845	27840
2013	75587	56297	19290

2016 2013

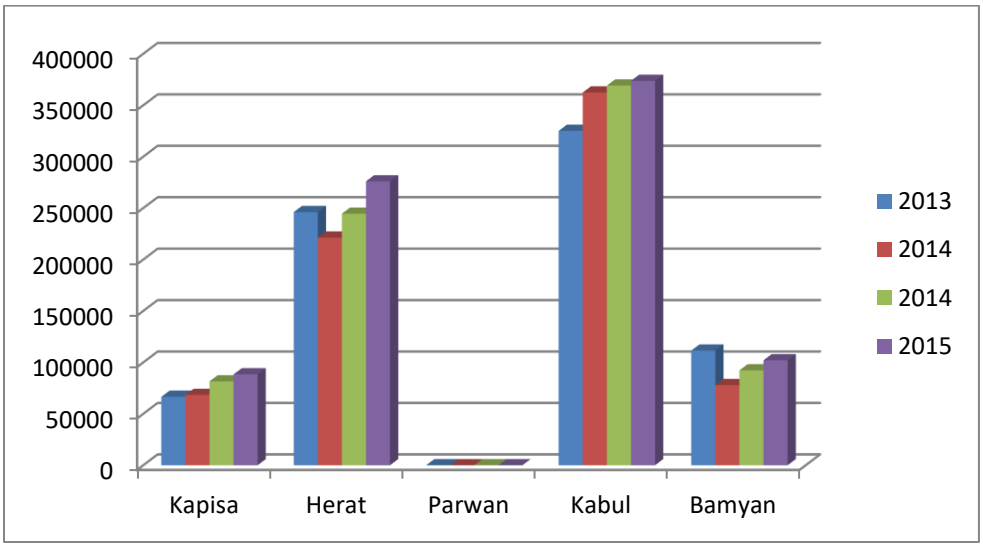
Despite some small fluctuations the general trend is an increase in antenatal and postnatal visits from 2013 to 2016. This increase has been greater for postnatal visits than antenatal visits. The average percentage

increases across all provinces for antenatal and postnatal visits are 19% and 30% respectively. This could be for a number of reasons including: an increase in the number of trained midwives operating in health facilities who can facilitate these visits, an improvement in the confidence pregnant women have in the ability of these midwives and an overall increase in the number of pregnancies and births during this period. The analysis of the survey data supports reasons one and two.

PREGNANCY-RELATED HEALTH FACILITY VISITS

The number of pregnancy related consultations (see chart below) has increased overall with the exception of the province of Parwan, where the figures remain low and unchanged.

Figure 19.

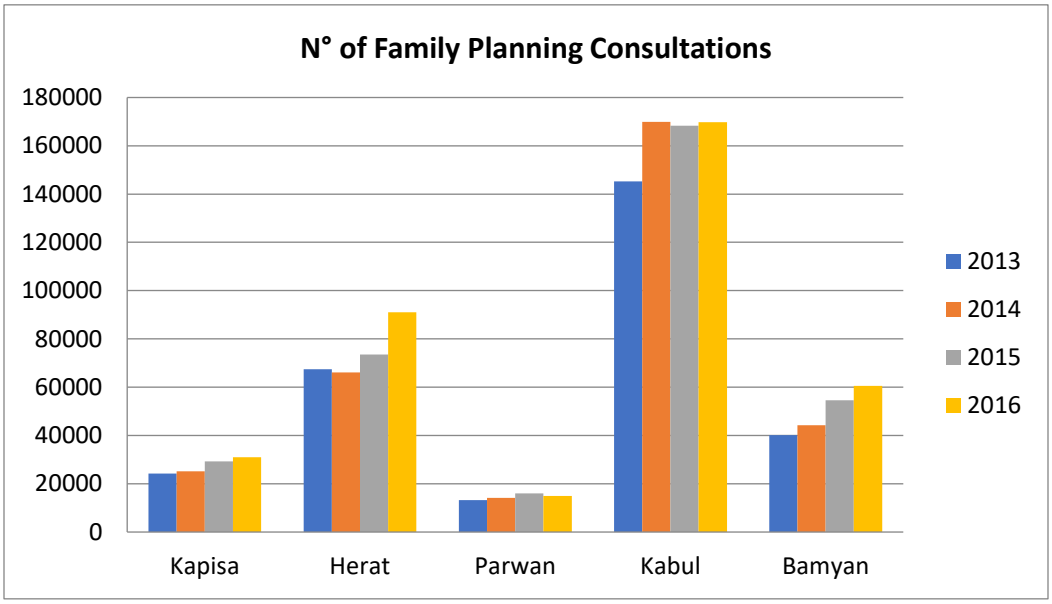


As with the increase in ante and postnatal visits this increase could be for a number of reasons including: an increase in the number of trained midwives operating in health facilities who can facilitate these visits, an improvement in the confidence pregnant women have in the ability of these midwives and an overall increase in the number of pregnancies and births during this period. The analysis of the survey data supports reasons one and two.

Family Planning Consultations in Health Facilities

The number of family planning consultations has increased by 26.5% over the 4 years for all five provinces with Kabul as a leading province followed by Herat, Bamyan, Kapisa and Parwan with the latter showing the lowest number of consultations. This information contradicts the data from the survey responses, which suggested that midwives did not have enough time or the skills to provide this service.

Figure 20.



Attendance of Health Facilities by women of a child-bearing age

The data shows that there has been a significant increase in attendance of health facilities by women of a child-bearing age for 4 provinces (Parwan was excluded from the analysis due to missing data) from 2013-16. Kabul and Herat show the highest number of visits, followed by Bamyan and Kapisa. Bamyan witnessed an almost 75% increase in the number of visits over the 4 year period.

Complex Cases

There has been an increase in the number of complicated cases towards 2016 for all five provinces, with Kabul showing the highest number of complications (it also has the highest number of deliveries) followed by Herat, Bamyan, Kapisa and Parwan. Elevation of values for the complicated cases can also be a result of the increase in health facility visits and the number of deliveries.

Other Data

Overall across the 5 provinces the number of staff has remained the same from 2013 to 2016, while the number of midwives has increased and now constitutes 14% of the staff. It stays constant in the provinces of Kapisa and Parwan but has significantly increased in Herat, Kabul and Bamyan. The number of female staff remains relatively unchanged and constitutes 20% of overall staff.

Health Facilities with AfD trained midwives 2013-2016

The analysis was based on evaluation of 14 data sets or parameters, for each province over a period of 4 years (2013-16). The mean was calculated for each parameter to serve as a base of a progress over time. The growth rate included in the analysis gives a numerical value to the progress achieved.

The data sets that are central to this evaluation are listed below. For the full list and analysis see Table 2. "Summary of the results for Health Facilities encompassing AfD trained midwives" in Annex 2. The data from Parwan is significantly different from the other provinces. Either the situation in Parwan is complex and needs further investigation to give a better context to the data or there are errors in the data. There certainly seem to be some inconsistencies within the data. It doesn't make sense that there would be such large % growth increases in the number of deliveries and antenatal visits between 2013-2016 but no % growth increase in pregnancy-related consultations.

Number of deliveries

Kapisa 49% growth rate, Herat 12% growth rate, Parwan 133% growth rate, Kabul 3% growth rate, Bamyan 85% growth rate.

Neonatal mortality ratio

Kapisa 18% growth rate, Herat 0% growth rate, Parwan 150% growth rate, Kabul 0% growth rate, Bamyan 0% growth rate.

Maternal mortality ratio

Kapisa 0% growth rate, Herat 0% growth rate, Parwan 50% growth rate, Kabul 0% growth rate, Bamyan 0% growth rate.

Antenatal visits 1 - 4

Kapisa: visit 1 - 36% growth rate, visit 2 – 31% growth rate, visit 3 – 36% growth rate, visit 4 – 36% growth rate

Herat: visit 1 - 7% growth rate, visit 2 – 7% growth rate, visit 3 – 7% growth rate, visit 4 – 7% growth rate

Parwan: visit 1 - 190% growth rate, visit 2 – 892% growth rate, visit 3 – 9700% growth rate, visit 4 – 22.5% growth rate

Kabul: visit 1 - 16% growth rate, visit 2 – 16% growth rate, visit 3 – 16% growth rate, visit 4 – 16% growth rate

Bamyan: visit 1 - 678% growth rate, visit 2 – 17% growth rate, visit 3 – 31% growth rate, visit 4 – 40% growth rate

Pregnancy-related visits

Kapisa 32% growth rate, Herat 12% growth rate, Parwan 0% growth rate, Kabul 16% growth rate, Bamyan 45% growth rate.

Family planning consultations

Kapisa 28% growth rate, Herat 35% growth rate, Parwan 59% growth rate, Kabul 17% growth rate, Bamyan 51% growth rate.

Visits by women of child-bearing age

Kapisa 32% growth rate, Herat 15% growth rate, Parwan (no data), Kabul 16% growth rate, Bamyan 75% growth rate.

Complex cases

Kapisa 49% growth rate, Herat 13% growth rate, Parwan 300% growth rate, Kabul 3% growth rate, Bamyan 91% growth rate.

Overall, there have been numerous positive changes between 2013 and 2016 in these health facilities where AfD trained midwives operate. These reflect the overall picture from all health facilities in the provinces. Notably there has been % growth in all types of visits to the health facilities and the number of deliveries. As with the data from all health facilities in the provinces, this could be for a number of reasons including: an increase in the number of trained midwives operating in health facilities, an improvement in the confidence pregnant women have in the ability of these midwives to carry out deliveries safely, an overall increase in the number of births during this period and an improvement in the quality of the health facilities themselves. The analysis of the survey data supports reasons one and two.

However, it is worrying that for most health facilities maternal and neonatal ratios have remained constant although the increase in complex cases in these health facilities should be taken into account. The percentage increase in maternal and neonatal mortality in Parwan province does give cause for concern but as explained above, this data and the context require further scrutiny. The % increase in neonatal mortality in Kapisa is also worrying. Such cases and indeed indicators with low growth rates could be further investigated to target and if

possible correct the key factors that are restricting progress. Whatever these restrictions are, they pose a risk to the future success of the project. This, however, is beyond the scope of this evaluation.

The Action for Development (AfD) Midwifery Training Project was launched during 2014 and it was in its final stages during 2017. It is possible that the increase in the number of deliveries, the number of antenatal and postnatal visits, the number of pregnancy-related visits, the attendance of women of a child-bearing age and family planning consultations are in part due to the influx of AfD trained midwives. The main barrier to greater progress is likely to be the small size of the training project. The numbers of midwives being trained are probably not yet great enough and the depth of the training not extensive enough to significantly influence the statistics. To truly substantiate this hypothesis the midwifery training project would have to be increased in length and scope.

PROJECT MANAGEMENT

To complete the evaluation there were some supplementary questions for AfD staff involved in the design, monitoring and implementation of the project. The answers to these questions are provided below.

How well did the project predict and respond to risks?

The main risks of the project were: a shortage of funds, a lack of collaboration with Ministry of Public Health officials and other stakeholders in Afghanistan and insecurity due to the ongoing conflict.

Shortage of funds

From the outset it was necessary for AfD to limit the geographical coverage of the midwifery training project due to low funds. Unfortunately there was still insufficient funding to complete the training programme in Bamyan province.

Lack of collaboration with Ministry of Public Health officials and other stakeholders

Although there was a risk that it would be difficult to collaborate with MoPH officials from the start of the project, AfD was able to establish a productive partnership with the MoPH in Afghanistan in order to carry out the project successfully. AfD also established partnerships with several organizations and associations in Switzerland (HEdS, Giving Women, Gloria Mundi Foundation, Swiss Solidarite International (SSI), various Geneva Canton communes & villes, UNFPA and WHO). This collaboration both facilitated the delivery of the project and gave a voice to the issues of maternal and infant health in Afghanistan.

Insecurity

The security situation was a great challenge for the implementation of the project. Due to the ongoing conflict there were sometimes delays in making contact with health personnel in certain provinces. AfD carefully selected the provinces with the security situation in mind and therefore there were no incidents which

compromised the safety of AfD staff visiting health facilities. AfD took careful precautions with staff safety. If the roads to some health facilities were insecure then the trainers made the journey by air at extra cost to AfD.

Was the budget sufficient - any under or over-spends?

The budget was insufficient but still the project was carried out almost to its full extent. In Bamyan province it was only possible to complete the training of the Master Trainers. The cascade training – where a trained midwife would then go on to train other midwives herself - was not carried out. There were no over-spends or under-spends.

How will the project activities be sustained now that this 3 year cycle has come to an end?

AfD hopes to implement the midwifery training programme in other parts of Afghanistan now that the pilot project has been successfully implemented and as soon as provincial health officials agree to support the extension and expansion of the training. At this time, AfD has received official requests from several provincial health directorates to provide the midwifery training in their target areas. More funds will be necessary to carry out this continuation and expansion of the project.

How effective was the monitoring, supervision and reporting system of the training course?

Very effective and in line with the expectation of the training plan. Feedback and recommendations from the midwives were collected for further development of the training curriculum while supervision and monitoring were conducted during the training.

Did the project contribute to AfD's own organizational development goals?

The AfD Mission is to "Reduce child and maternal mortality in Afghanistan through community-based, innovative and cost-effective approaches"[9]. The Midwifery Training Programme is the perfect embodiment of this mission statement. Furthermore, empowering women through education and training, as achieved by the Midwifery Training Programme, contributes significantly to the overall Vision of the organization "Healthy Families, Empowered Communities"[10].

[9] http://www.action-for-development.org/index.php/en/history/

[10] ibid

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are presented within the 5 evaluation categories:

Achievement of Objectives

According to the data collected the **overall project objective was partially achieved**. Maternal and infant mortality rates in most of the rural areas of Afghanistan where the project was rolled-out remained constant despite an increase in the numbers of complex cases. The survey responses suggest that there had been an improvement in these statistics but the data from the health facilities did not back this up. However, this doesn't mean that the data from the survey responses in incorrect. In reality the numbers of midwives being trained are probably not yet great enough and the depth of the training not extensive enough to significantly influence the statistics on infant and maternal mortality.

The majority of the **specific project objectives were achieved**. In the areas covered by the project there was an increase the proportion of pregnant women who receive ante-natal care; an increase the proportion of births attended by qualified midwives and an improvement in the management and treatment of the most common complications during pregnancy and birth. It is credible that this was achieved in part due to an improvement of the skills and competence of the trained midwives. It is possible there has been an increase in the demand for care through community outreach however the data doesn't give us a clear answer on this. More work may need to be done to expand the use of family planning services. There remains a need and an appetite amongst health professionals and the community to continue and expand the training programme.

Participant Satisfaction

Over 90% of the midwives were satisfied with the training. All of the Master Trainers felt competent and confident in teaching within the curriculum. The data indicates that the trained midwives were successful in practicing their newly enhanced skills in the field.

Effectiveness of the course and its implementation

100% of trained midwives and master trainers felt that overall the quality of the capacity building training course was sufficient. The majority of midwives, master trainers and ministry of public health officials wish to see an increase in the duration and frequency of the training and an expansion of the number of topics covered by the training. The midwives and master trainers were satisfied with the materials and modules used in training. Collectively they described them as: well organised, clear, relevant, interesting, and efficiently

presented. The only negative aspect of the course implementation was that some rural health facilities lacked the necessary equipment and medication and had poor infrastructure and insufficient staff capacity for the training to be carried out as effectively as possible.

The master trainers believed the training to be cost-effective compared to official providers although no further explanation was given. Given that 1midwife trained by the AfD project was then able to go on to train 5 more herself, we can deduce that the training was cost-effective.

Learning for the Future

Given the success of the project, the continuing need for more and better qualified midwives in Afghanistan it is recommended that all aspects of the current training project should be continued into 2018 and beyond. The ministry of public health officials and the master trainers would like to see the training project rolled out to more provinces.

Together the four groups recommended the following elements to be added to the training project in the future:

- Improve the medical ethics aspects of the training (focus group only);
- Further improve and increase the general knowledge of the midwives;
- An increase in the duration and frequency of the training (practical and theoretical);
- An expansion of the number of topics covered by the training (updated regularly), including: Treatment of severe PPH, Nutrition, Severe Pre-eclampsia and Eclampsia, Manual Vacuum Aspiration (MVA), Emergency Obstetrics Care (EOC), Family Planning, Postnatal Care, Episiotomy, Blood Transfusion, Diseases during pregnancy, Placenta abnormalities, TB; Malaria; HIV; HBS; HCV; Pregnancy and infectious diseases and Nutrition.
- An increase in the number of partners in order to increase funding/increase the budget.

Whilst there were no reported negative aspects of the training, a number of potential risks to the future of the training project were revealed.

1) Under-investment in healthcare which means that in some cases health centres lack the facilities and staff capacity the midwives require to operate effectively and for the trainers to carry out the training in the best possible way.
2) A shortage of midwives generally which means that those who are practicing have a heavy work load and sometimes not enough time to cover subjects beyond immediate care e.g. family planning advice.
3) A possible issue with the selection of midwives for the training. The project administrators may need to take extra care to ensure that the right midwives are chosen to continue the training “in cascade”.
4) An increase in budget will be needed to roll out the recommended improvements.

5) The specific reality in the health center's where AfD trained midwives are already operating and where the statistics have shown a lack of progress should be investigated further to identify and address any as yet unknown restrictions to the future success of the project.
6) Insecurity caused by the ongoing conflict in Afghanistan has been well managed by AfD to date but it remains an ongoing threat to all development projects in the country.

These recommendations and potential risks should all be addressed at the planning stage of any future continuation and expansion of the project.

Project Management

The project was well-managed and predicted and responded sufficiently to risks posed by a small budget, a lack of collaboration and security. The greatest threat to the continuation of the project is a lack of funding. The Midwifery Training Project is the perfect representation of the overall Mission of AfD "Reduce child and maternal mortality in Afghanistan through community-based, innovative and cost-effective approaches"[11].In this way it can be considered one of its flagship projects.

[11] http://www.action-for-development.org/index.php/en/history/

Annexes

Annex One: Questionnaire responses from Midwives, Master Trainers, Ministry of Public Health Representatives and Focus Group Representatives.

Annex Two: Quantitative data analysis by Olena Datsyk.

Annex Three: Quantitative data analysis by Mary Kirkbride.

List of Tables and Charts

References

Afghanistan's demographic and Health Survey 2015. Retrieved from https://dhsprogram.com/pubs/pdf/FR323/FR323.pdf

Afghanistan Statistics. Retrieved from http://cso.gov.af/Content/files/%D8%B3%D8%A7%D9%84%20%D9%86%D8%A7%D9%85%D9%87%20%D8%A7%D8%AD%D8%B5%D8%A7%D8%A6%DB%8C%D9%88%DB%8C%20%D8%B3%D8%A7%D9%84%201394/Health%20Facilities.pdf,

Midwifery in Afghanistan. Retrieved from https://www.unicef.org/sowc09/docs/SOWC09-Panel-3.4-EN.pdf,

MoPH of Afghanistan. 2016. National Health Strategy 2016-2020. Sustainable progress and building for tomorrow and beyond. 201 p.g 40. Retrieved from http://extwprlegs1.fao.org/docs/pdf/afg168613.pdf

Newbrander, W., Ickx, P., Feroz F., & Stanekzai, H. (2014) Afghanistan's Basic Package of Health Services: Its development and effects on rebuilding the health system. Global Public Health, 9 (Suppl 1): S6–S28. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4136668/,

Raja, F. 2014. State of Afghanistan's Midwifery. UNFPA. Retrieved from https://afghanistan.unfpa.org/sites/default/files/pub-pdf/MidwiferyReport_English.pdf

Speakman, E., Shafi, A., et al. (2014) Development of the Community Midwifery Education initiative and its influence on women's health and empowerment in Afghanistan: a case study. BMC Woman's Health, 14: 111 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4237830/

UNICEF. Annual Report 2010. Retrieved from https://www.unicef.org/publications/index_3684.html

UNICEF. State of the World's Children. (2015). Retrieved from https://data.unicef.org/?s=state+of+the+world%27s+children

UN. Least developed countries. Retrieved from https://www.un.org/development/desa/dpad/least-developed-country-category.html

UN. Sustainable development goals. Retrieved from http://www.un.org/sustainabledevelopment/health/

WHO. Maternal mortality in Afghanistan in 1990-2015. Retrieved from http://www.who.int/gho/maternal_health/countries/afg.pdf