



Escuela Andaluza de Salud Pública
CONSEJERÍA DE SALUD



World Health
Organization

Sexual and Reproductive Health in Protracted Crises and Recovery

Expert Consultation, Granada, Spain

28-30 September 2009

Case Study Afghanistan

Reproductive Health in Post-conflict Afghanistan

Case study of the formation of health services for
women in the recovery from twenty years of war

Iain Aitken

**Management Sciences for Health
and
School of Public Health, Granada**

September 4, 2009

| | | |
|-----|---|----|
| 1 | Background..... | 4 |
| 1.1 | Years of war..... | 4 |
| 1.2 | Health services before and during the war..... | 4 |
| 2 | Post-conflict assessment..... | 5 |
| 2.1 | Reproductive Health services and resources..... | 5 |
| 2.2 | Reproductive Health Problems..... | 6 |
| 2.3 | Other Reproductive Health problems..... | 6 |
| 3 | Policy..... | 7 |
| 3.1 | Contracting out..... | 7 |
| 3.2 | Basic Package of Health Services (BPHS)..... | 7 |
| 3.3 | Reproductive Health policies..... | 8 |
| 3.4 | Essential Package of Hospital Services..... | 8 |
| 4 | Reproductive Health Services..... | 8 |
| 4.1 | BPHS with/without technical assistance..... | 8 |
| 4.2 | Maternal health..... | 9 |
| 4.3 | Birth spacing..... | 10 |
| 4.4 | Quality assurance..... | 12 |
| 5 | Human Resources..... | 13 |
| 5.1 | Midwives..... | 13 |
| 5.2 | Community Health Workers (CHWs)..... | 15 |
| 6 | Other support systems..... | 16 |
| 6.1 | Financing of health services..... | 16 |
| 6.2 | Reporting, Monitoring and Evaluation..... | 18 |
| 7 | Reflections: Seven years on..... | 20 |

1 Background

1.1 Years of war¹

When the Taliban were defeated and left Afghanistan in December 2001, Afghanistan had been at war for twenty two years. The Soviet army had invaded in December 1979 to support the Communist government then in power in Kabul, but after ten years of resistance by the Mujahidin, with a lot of international support, the Soviets eventually left in February 1989. Kabul was captured by the Mujahidin and the Communist government replaced in 1992, but this was followed by a bitter civil war between different factions of the Mujahidin. The period from 1994 to 1996 saw the emergence and spread of the Taliban from their roots in the rural areas around Kandahar. In 1996 they captured Kabul, and by 1998, they were in control of 90% of the country. Following the September 11 attacks in the US, the combination of US aerial bombing and the ground forces of the Northern Alliance drove the Taliban out of Afghanistan. In June 2002, the Loya Jirga selected Hamid Karzai to form the transition government.

The war resulted in considerable destruction of infrastructure. In rural areas, whole villages were destroyed together with their orchards, irrigation systems and fields. Large areas were covered in land mines. Kabul was reduced to little more than rubble during the civil war. A million are said to have died and 700,000 widows were left by the end of the war. By 1989, there were 3.7 million documented refugees in Pakistan and almost 3 million in Iran. Huge numbers of people were internally displaced within the country. Between 1992-3 about 2.5 million refugees were repatriated. However, the Taliban period saw a further exodus. A large proportion of professionals, including health professionals, and many other educated people left the country.

1.2 Health services before and during the war

Prior to the war, Afghan health and health services were very poor. In 1960 the infant and child mortality rates were 215 and 360 per 1000 live births; the total fertility rate was 7.7. Health services were mostly provided by the government, but there was very little outside the main cities. What there was largely consisted of vertical programs against tuberculosis, malaria and Leishmaniasis.

Following the Soviet invasion in December 1979, the international response to provide health care was prompt. By June 1980, three French PVOs were operating inside Afghanistan. Over the next three to four years the number of agencies providing care in Afghanistan, to refugees in Peshawar, and training Afghans for cross-border projects increased. However, by 1984 pressure from Soviet bombing was making it increasingly difficult to maintain health facilities in rural areas. A major renewed effort started in 1986 with the Afghan Health Sector Support Project, a USAID-funded project implemented by Management Sciences for Health (MSH). They worked with regional health committees to support 300 health facilities and 2,200 male basic health workers, trained and supplied from Peshawar in Pakistan. The Basic Health Workers trained village birth attendants and provided health education for women. As

¹ A. Rasanayagam. Afghanistan: A Modern History. I.B.Taurus, London, New York, 2005.

a result, community leaders began to request female doctors or midwives to work in the clinics.² Soon after the Soviet withdrawal, US government support ceased. At the same time, NGOs like the Swedish Committee for Afghanistan (SCA), the Danish Committee for Aid to Afghan Refugees (DACAAR) and Doctor without Borders were continuing projects for various donors in Afghanistan and Pakistan. The UN Office of the Coordinator of Humanitarian Affairs in Afghanistan (UNOCHA) was formed in 1988 but was unable to operate because of the anarchic conditions.

Later, in the 1990s, there were over 70 NGOs still operating under the umbrella of the Agency Coordinating Bureau for Afghan Relief (ACBAR), providing a variety of health and other relief services. Taliban rule covered most of the country, but was highly decentralized. They had no administrative capacity and there was no central organization of services. All girls' schools were closed and female employment was forbidden because they believed that women had no significant role outside the home. There were, therefore, no female health workers and many boys' schools closed for want of teachers. In June 1998 all women were banned from attending hospitals. At the same time, female UN staff were forbidden to leave their homes without a male relative. UNICEF left the country in response. In July, all NGOs were closed down by the government. The EU suspended all humanitarian aid in response.³

2 Post-conflict assessment

An assessment of the health situation was soon under way early in 2002. The main contributors to the assessment were a health facilities and hospitals study (Afghan National Health Resources Assessment [ANHRA]), a UNICEF/CDC study of maternal mortality in 2002 and a UNICEF MICS study in 2003. Two major discoveries from these studies were the appallingly high maternal mortality rate in Afghanistan and the great lack of female health workers especially midwives.

2.1 Reproductive Health services and resources

The facilities study was a comprehensive inventory of 912 facilities and 117 hospitals. Of the hospitals, only 47% had female staff, and only 24% provided cesarean sections. Of the primary care centers, 48% provided antenatal care and deliveries, but only half of those were adequately equipped. Only 29% offered three or more methods of contraception. Female health professionals in the country constituted 90 out of 647 specialists, 605 out of 2203 general physicians, and a total of 467 midwives. Forty percent (40%) of health facilities had no female health worker.

² R.W. O'Connor. Health Care in Muslim Asia: Development and Disorder in Wartime Afghanistan. Management Sciences for Health, Boston, 1994.

³ Rasanayagam, *ibid.*

2.2 Reproductive Health Problems

The maternal mortality study⁴, done in four geographically contrasting districts in early 2002, estimated a national maternal mortality ratio of 1600-2200 per 100,000, along with Sierra Leone the highest national ratios in the world. The district rates reflected how remote the communities were (The MMR was 418 in Kabul; 774 in Allisheng, a rural area with access to a hospital in a few hours; 2182 in Maywand, a desert area with nomadic population more than a day's walk from Kandahar hospital; and 6507 in Ragh, Badakshan, ten days walk from the hospital in Faizabad. (The latter is the highest MMR ever recorded.) The causes of maternal death are the usual ones (hemorrhage, 38%; obstructed labor, 26%; and eclampsia, 10%), but the excess in Ragh is made up particularly of obstructed labor because the travel time is so long.

Fertility rates have been very high. TFRs of 6.23 or 6.8 are variously quoted together with a crude birth rate of 48 per 1000. The Taliban had banned the use of modern contraceptives in 1996, so supplies had been scarce. On the other hand, refugees returning from Pakistan and especially from Iran had become used to a good supply of contraceptives and some promotion of family planning.

A summary of reproductive health indicators at the time would include:

Maternal health

| | |
|----------------------------------|---------------------------|
| Maternal mortality ratio | 1600 per 100,000 |
| Antenatal care by skilled worker | 16% |
| Skilled birth attendance | 14% (Urban 35%, rural 7%) |

Family Planning

| | |
|-------------------------------|-------------------------|
| Total fertility rate | 6.23 (Others quote 6.8) |
| Crude birth rate | 48 per 1000 |
| Heard of contraceptives | 28% |
| Contraceptive prevalence rate | 8.5% |

2.3 Other Reproductive Health problems

Sexually transmitted diseases seem to be uncommon at this time. HIV is also uncommon so far. In drug users who inject, rates of 3% have been documented, but outside of these high risk groups the prevalence seems to be very low.

⁴ Bartlett LA, et al, 2005. Where giving birth is a forecast of death: maternal mortality in four districts of Afghanistan, 1999-2002. Lancet 365: 864-70.

Gender based violence and rape is known to be widespread, but is grossly under-reported.⁵ This is due to both the shame associated with the experience and a legal system that confuses the terms for rape and adultery and continues to be defined and implemented by conservative elements in society.

3 Policy

The challenge for a new government was that all the policies were out of date, the infrastructure and human capacities were so depleted, and resources were so scarce that an altogether fresh start was necessary.

3.1 Contracting out

An early and important policy decision was to contract out delivery of the BPHS to NGOs with the MOH adopting a stewardship role for the nation's health services. At the Joint Donor Mission in March to April, 2002, three options for delivering services seemed to be possible:

- Expand the Ministry of Health to provide services,
- Continue to fund NGOs with little control by government, or
- Make Performance-based Partnership Agreements (PPAs) between the MOH and NGOs which would allow the MOH to utilize existing NGO capacity to deliver services while still maintaining control over the strategic direction of the health sector.

The World Bank representatives pushed very hard for the adoption of the PPA option based on recent experience in Cambodia. The MOH and other donors had a number of concerns. The experience of one province in Cambodia seemed to provide a flimsy evidence-base for a nation-wide policy in Afghanistan. The World Bank wanted to make province-wide agreements while other donors were concerned about the managerial capacity of the existing NGOs to deliver at that level and preferred smaller clusters of districts. Others were also concerned about the NGOs' capacity to deliver the full range of services. The NGOs were not involved in these discussions and were either confused about what was going on or concerned about 'privatization' and the potential loss of their independence. In the end, the major donors all agreed to a contracting-out policy, but implementation has differed significantly between them. (See section 6.1) The World Bank also agreed to support a contracting-in process whereby they would fund MOH provision of services in three smaller provinces close to Kabul.⁶

3.2 Basic Package of Health Services (BPHS)⁷

The initial drive to agree on a package of priority services came from the need to define the content of the contract to be made in the PPAs. The initial draft of the BPHS was prepared in two weeks by a WHO consultant with minimal consultation. However, in subsequent months, the Ministry of Health led a process of consultations and task forces to determine its major priorities for rebuilding the national

⁵ UNAMA and OHCHR. Silence is violence: End the abuse of women in Afghanistan. Kabul, Afghanistan. 8 July, 2009.

⁶ Lesley Strong, Abdul Wali, Egbert Sondorp. Health Policy in Afghanistan: two years of rapid change. London School of Hygiene and Tropical Medicine, 2005.

⁷ Transitional Islamic Government of Afghanistan, Ministry of Health. A Basic Package of Health Services. Kabul, 2003.

health system and decide which health services were most important to address the major health problems of the majority of the population. This Basic Package of Health Services was to consist of those services with the greatest impact, which were cost-effective, and which could be scaled up equitably to rural and urban populations. All of the services in the package are intended to be available as an integrated whole, rather than being piecemeal or provided through vertical programs. The results were published in March 2003, and clearly emphasize the needs for maternal and child health. Reproductive health is a priority within the context of an integrated package of health services. Subsequent revisions to the BPHS have been done in 2005 and 2009 with no change in the basic set of priorities.

A significant innovation in the BPHS was the emphasis placed on developing Community-based Health Care. Volunteer Community Health Workers (CWs) were to be selected by communities, one male and one female for every 100-150 families. Their role is to promote healthy life styles and behaviors in the community, promote use of preventive services at the health facility, provide treatment for common childhood illnesses, and promote and supply birth spacing methods. Given the cultural constraints on women's access to health care for themselves and their children, the inclusion of female CHWs in the BPHS was the most significant innovation

3.3 Reproductive Health policies

As part of the overall policy development process and providing the technical content for the BPHS, a series of technical working groups met to develop policy, strategy and standards documents for all the priority areas of the Ministry of Health. These were also published in 2003, and included a National Reproductive Health Strategy, 2003-2005, and National Standards for Antenatal care, Family Planning, Newborn Care and Post-partum Care; and a guideline on Safe Motherhood at Community level. Other documents were to appear later to complete the policy process.

3.4 Essential Package of Hospital Services

After the initial work on the BPHS was complete and implementation had commenced, attention was given to hospital care, and the Essential Package of Hospital Services (EPHS) was published in 2005.

4 Reproductive Health Services

4.1 BPHS with/without technical assistance

The BPHS programs were implemented by NGOs with grants from the three major donors: the World Bank, the European Community and USAID. The first two provided no additional support or technical assistance to NGOs, but USAID gave supervision of the NGO grants and provision of technical assistance to the NGOs as well as to the MOH through the Rural Expansion of Afghanistan's Community-based Program. (REACH)(This was implemented by a consortium led by Management Sciences for Health.)

4.2 Maternal health

4.2.1 Skilled birth attendance

Although quite a number of village women had been trained as TTBAAs, only 10% of women nationwide were being delivered by TBAs and 75% were delivered by family members or friends (MICS, 2003). Given this and the lack of international evidence for any impact on maternal mortality by TTBAAs, the MOH decided to discontinue training TBAs and focus, instead, on promoting skilled birth attendance. (TBAs were encouraged to train as CHWs) Skilled birth attendance has risen from 7% in 2003 to 19% in 2006. Predictably, use of a skilled attendant depends upon distance from the facility: 26% if <2 hours; 15% if ≥ 2 but <3 hours; 7% if ≥ 3 but < 4 hours; 4% if ≥ 4 but <6 hours; and 2% if ≥ 6 hours.

4.2.2 Critical clinical standards

The two leading causes of maternal death identified were postpartum hemorrhage and obstructed labor. Therefore, use of the partograph and active management of the third stage of labor including parenteral injection of oxytocin were adopted as policy and became part of the training of all midwives. A field trial of informed distribution of Misoprostol by Community Health Workers to mothers delivering at home in 2005-6 proved very successful, and a gradual scaling up of the program is currently being planned.

4.2.3 Emergency Obstetric Care

Basic Emergency Obstetric Care (BEmOC) should be part of the skills of all midwives, so all health facilities should be equipped to manage BEmOC. Comprehensive Emergency Obstetric Care should be available at all hospitals.

4.2.4 Antenatal Care

Full antenatal care is available only from skilled providers at health facilities. The standard proposed is a series of four planned attendances. Use of antenatal care has risen from 8% in 2003 to 32% in 2006. This is also sensitive to distance, and most women come from within a radius of 2-3 kilometers.

Community Health Workers (CHWs) are trained to refer pregnant women to the facility for antenatal care and tetanus toxoid injections. They are also able to provide some antenatal care. They distribute iron and folic acid tablets and mebendazole for deworming. They also have four sets of IEC materials (flip charts) on healthy pregnancy, birth preparedness, safe home delivery, and postnatal and newborn care. They use a community map to identify which households have pregnant women and whether or not they have received antenatal care.

4.2.5 Postnatal and newborn care

Postnatal and newborn care has been a rather neglected priority. The culture of facility care has involved newborn care by the cleaning lady and very short stays for mother and child after delivery. This has received attention. For home delivery, a new in-service training program for CHWs on Care of the sick child and newborn care is implementing a series of home visits to the newly delivered mother on days 1, 3 and 7 with a clear set of tasks for each day.

4.2.6 National performance in Maternal Health

| | MICS 2003 (Rural) | Afghan Household Survey 2006 |
|---------------------------------|-------------------|------------------------------|
| Antenatal care | 8% | 32% |
| Skilled birth attendance | 7% | 19% |

HMIS data show that referral of complicated pregnancies has not increased significantly over the past four to five years. The average national cesarean section rate remains at one percent.

4.3 Birth spacing

4.3.1 Beginnings: 2003-2006

According to the 2003 BPHS, staff at health facilities should provide condoms, oral pills, DMPA and IUDs; CHWs at health posts should provide condoms and oral pills. Permanent methods were not included in the Family Planning standards. In the 2005 revision of the BPHS, CHWs were allowed to provide DMPA injections, but only after it had first been prescribed by a health professional at the health facility. In the 13 USAID-supported provinces CHWs used the community maps as a means of monitoring the pregnancy or family planning status of families.

In the REACH-supported provinces there were additional inputs relevant to family planning. As part of a refresher training program for the staff of health facilities there was a three day module on family planning. This was supplemented by additional short practical training courses, especially to train female workers how to insert IUDs. During 2005, family planning and EPI were two programs used as practical training in improved program implementation for NGO managers. Initial goals were to get NGO staff using available data to monitor programs and identify difficulties. Problems like unreliable supplies of contraceptives were then identified and procedures put in place to improve them.

At the same time, USAID was supporting a social marketing project that, among other items, promoted the sale of condoms, oral pills and injectables. By early 2006, these products were available and the most popular brands in 6,330 pharmacies, stores and street vendors in 30 out of the 34 provinces. All vendors received training. Monthly sales ran at about 500,000 condom packs, more than 60,000 cycles of pills, and 16,000 vials of DMPA.

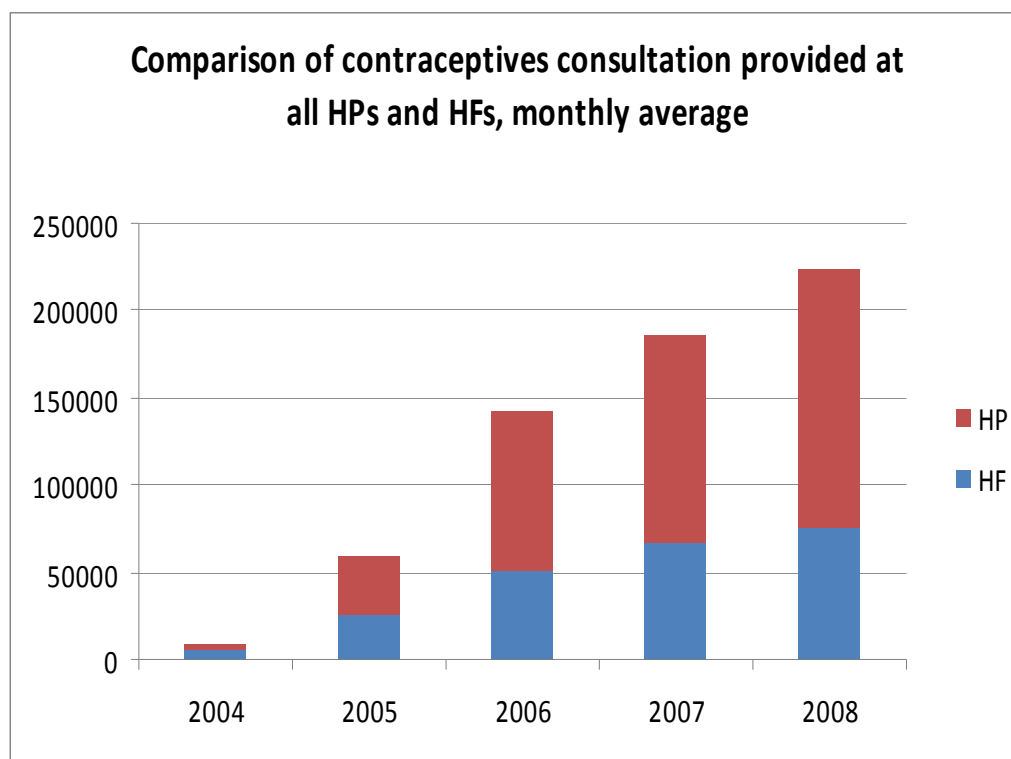
Behavioral change communication was a major activity. Flip charts promoting birth spacing and explaining methods of contraception were provided to health workers and salespersons. Radio spots and a series on family planning in different languages were broadcast, and three major television programs were broadcast in early 2006. In early 2008, the social marketing project worked with the Ministry of Religious Affairs and trained 600 mullahs to promote birth spacing methods at Friday prayers in their mosques. An important problem that was identified in 2005 was the number and variety of misconceptions and false beliefs about contraceptives. It soon became clear that many of these actually

came from health workers themselves. A brief fact sheet, Myths and Realities on Family Planning, was developed and circulated to all health workers.

4.3.2 National performance in Family Planning

According to the Afghan Household Survey (2006), knowledge of modern contraceptives seems to have remained stubbornly low. However, household surveys in the USAID-supported provinces in 2007 found knowledge of at least one modern contraceptive in 64% of households, and a national sample survey done by the social marketing project, COMPRI-A, found it in 84% urban married women and 74% rural married women. With the additional inputs to the program in the USAID-supported provinces, CPRs of 26% and 35% were found in 2006 and 2007 respectively. The important message from the graph is that in the last 2-3 years, 66% of all public sector family planning consultations have been with CHWs at health posts.

| | MICS, 2003 | | Afghan Household Survey 2006 |
|-------------------------------|------------|----------|------------------------------|
| | Rural | National | |
| Heard of modern contraceptive | 22% | 28% | 33% |
| Using modern contraceptives | 5.3% | 8.5% | 16% |



4.3.3 Since 2006

From 2005 to 2006 a small operations research project by MSH and funded by the William and Flora Hewlett Foundation explored and demonstrated what is necessary to significantly increase the use of contraceptives for birth spacing in three rural districts. In each district, the CPR increased by an average 25 percentage points over the course of nine months. This was understood to have a significant potential impact on the maternal mortality rate in Afghanistan. The MOPH was sufficiently impressed to ask for the lessons learned to be scaled up nationally. USAID agreed to fund this scale up program.

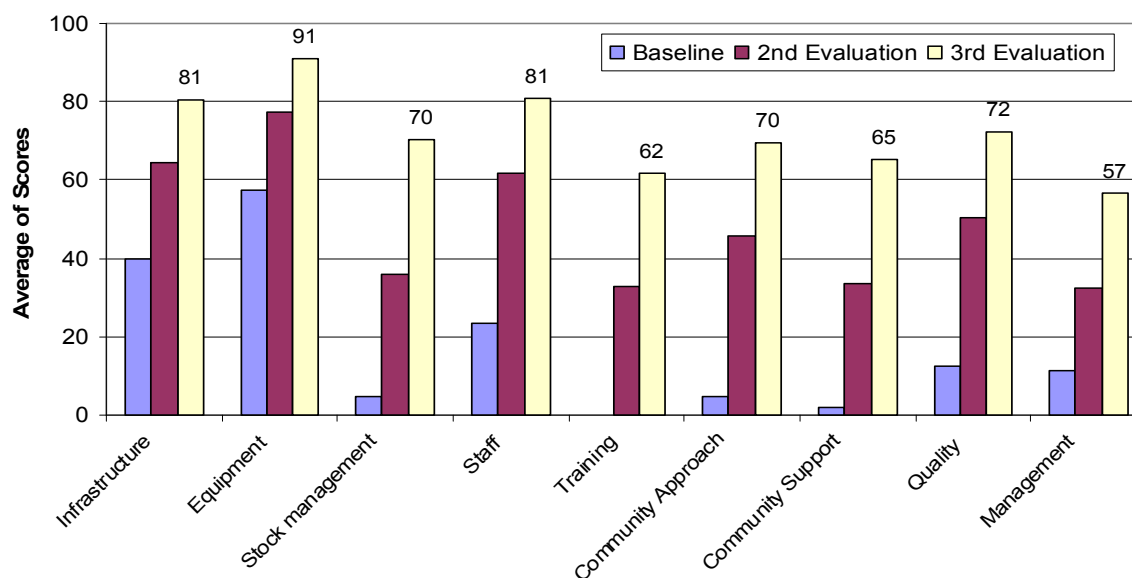
By the end of 2009, the Scaling up Success in Family Planning program will have been implemented in all the USAID-supported provinces and expansion to the rest of the country is being planned. Follow-up household surveys have not yet been done. The lessons learned from the Hewlett project have been applied in five key program elements: a) Active mobilization of communities through their leadership with a culturally-appropriate message emphasizing birth-spacing, and provision of small pamphlets that accurately describe the available contraceptives thereby addressing the main prevalent misconceptions. This is done by the CHWs but with initial support through several visits by the Community Health Supervisor from the health facility. b) A change in national policy to allow CHWs to initiate provision of DMPA to clients. The safety of this was demonstrated in the Hewlett project and is supported by international evidence. c) CHWs have been given a refresher course in provision of family planning through a course focused on postpartum family planning. This included and added the introduction of LAM, initiation of DMPA and training in giving injections and infection-control. d) Provincial NGO and MOPH managers were oriented and prepared implementation plans for their province. e) The Family Planning and Community-based Health Care departments in the MOPH were strengthened with new management and training staff who led the training of the provincial staff in these first provinces and will now be able to scale up the program to the rest of the country.

4.4 Quality assurance

The USAID REACH project demonstrated that it was possible to combine expansion with a focus on quality improvement. Quality improvement in rural health centers in all 13 provinces was achieved through use of the Fully Functioning Service Delivery Point standards-based management tool. The graph shows the improvements achieved by the facility staff between years 2005 and 2006 in 6 provinces. Perhaps most notable were the changes in the staff's approach to and support for the community-based activities, many of which were important for reproductive health programs.

In the past two years, the Health Services Support Program, a USAID-supported project led by JHPIEGO, has adapted the FFSDP and included a significant number of clinical standards, and developed quality assurance tools for district hospitals and village Health Posts.

Health facilities' performance over time - 9 standards (76 HF in 6 Provinces)



5 Human Resources

In the cultural context of a county like Afghanistan, where women under most circumstances will only consult a female health worker, the priority for the establishment of accessible and acceptable reproductive health services was the rapid multiplication and distribution of female health staff. In 2002, there were 467 midwives and very few female CHWs. In 2002, only 60% facilities had a female health worker, but with the rapid expansion of facilities, that dropped to 21% in 2004. Meeting the need in Afghanistan has underlined the importance of addressing the human resource challenge with a comprehensive approach. The main partners involved in this process were the General Directorate of Human Resources, the Department of Reproductive Health and the Institute of Health Sciences (HIS) in the MOPH, with technical assistance from the JHPIEGO Safe Motherhood Unit of the REACH Project.

5.1 Midwives

5.1.1 Testing and Certification

Among the many people who returned to Afghanistan after the war were many who had worked as health workers for a variety of NGOs both in Afghanistan as well as among the large refugee communities in Pakistan and Iran. Many had been trained on the job, and many of the certificates that were presented turned out to be forgeries. The MOPH instituted a program of Testing and Certification to bring as many as possible of these people into the system. Out of a total of 2,394 people who were tested, only 469 were female. Of these, 17% achieved a registered level, 24% reached an assistant level and 59% failed. A major failure in the system was the failure to develop upgrading courses, but

resources were particularly scarce at the time. The contribution to the ranks of midwives was very small. The need for midwives was estimated at more than 5,000.

5.1.2 Midwifery Training

In 2002, there were 467 midwives, five IHS midwifery schools requiring 12th grade for entry, but most of the midwives were working in hospitals. Only 21% of health facilities had a female health worker of any sort, and the challenge of deploying midwives in all the rural health centers required a new approach. The decision was made to train a new cadre of midwives, Community Midwives, who would be selected and trained to work in rural health centers. The IHS schools would train Hospital Midwives for hospitals and Comprehensive Health Centers.

By 2006, there were 16 new Community Midwifery schools. In 2009, there are 22 schools. They are run by NGOs with funding from a variety of donors. By mid-2009, 1,961 new midwives had been trained; 1,675 (85%) have been deployed, and 61% of health centers now have at least one midwife.

5.1.2.1 Selection and deployment

The critical part of the new program has been to ensure that the women who graduate are actually deployed. In fact the deployment rate for the Community Midwifery schools has been generally over 95%. The lower deployment rates have been from the IHS schools, located in regional cities where jobs are already filled, and drawing their students largely from those urban populations. The Community Midwifery schools have worked with the provincial MOPH staff and the NGOs implementing the BPHS to identify those health centers requiring staff. The schools and MOPH have then worked with communities around those centers to identify women from the communities, preferably married with children, who are willing to return to work at that center for at least five years. The communities have also worked with the schools to ensure that the training facilities and student hostels are safe and secure environments for the women and their children.

5.1.2.2 Competency-based training

The enthusiasm for opening Community Midwifery schools led to concerns about quality of education, so a Midwifery Education Policy was prepared and approved; this detailed policies and standards for recruitment, education and deployment. Standardized curricula were developed for the two programs based on the competencies agreed by the International Confederation of Midwives. Teaching materials (Learning Resource Package) were developed and translated into the two major languages of Afghanistan (a significant challenge), and USAID-supported schools received a variety of materials for skills laboratories. Teachers were all provided training in Emergency Obstetric Care and Effective Teaching Skills. Student assessment is done with a Clinical Experience Log Book, but this has proven challenging to implement.

5.1.2.3 Accreditation of midwifery programs

In order to assure adequate quality of midwifery training programs, recognition of the diplomas awarded by the programs, and provide guidance and a mechanism for improving quality, the MOPH introduced an accreditation system for midwifery programs in Afghanistan. The Institute of Health Sciences convened a workshop for midwifery faculty members and technical staff. They defined 59

standards in four areas: classroom and practical instruction; clinical instruction and practice; infrastructure, curriculum and training materials; and school management.

The program was piloted in the ten schools directly supported by USAID/REACH. Baseline assessments were made by the schools' staff with assistance from REACH staff. Overall performance results ranged from 34% to 70%. All the staff were introduced to the Performance Improvement Model and encouraged to identify gaps and their causes and make improvements. Quarterly accreditation workshops were held thereafter for 2-3 staff from each school to come together, present their results, and share experiences, problems and solutions. Staff from other schools rapidly heard about this program and insisted on joining in these workshops.

The success of the program led directly to the drafting and approval of a Midwifery Education and Accreditation of Midwifery Schools policy. In November 2005 an autonomous, semi-governmental body was established as the National Midwifery Education Accreditation Board. In January, at the 4th Accreditation Workshop, all schools in Afghanistan were invited to be present for the Human Resources Directorate to present the policy and program. Accreditation involves an external quality review. Schools are encouraged to have a non-binding review ahead of the binding review by the external board. This gives them an opportunity to identify and fix any outstanding problems. By June 2006, eleven schools were already fully accredited.

5.2 Community Health Workers (CHWs)

Distance, climate and culture have imposed severe restrictions on the access of women to health care in Afghanistan. Male community volunteers had been trained in Afghanistan during the 1970s and again for the cross-border programs during the war against the Soviets. The new policy in 2003 determined that female and male CHWs were to be trained, one of each to every 100-150 families. Since then, 20,000 CHWs have been trained, almost half of whom are women. They are all unpaid volunteers, and the drop-out rate over 6 years is still less than 2%.

The CHW's job description includes the promotion of healthy life styles, appropriate use of preventive MCH care, the management of common illnesses especially of young children, and the provision of birth spacing methods. CHWs are selected by their communities. Their training is done in three 3-week courses separated by periods of two months for practical application of the new skills. It emphasizes practical skills, and starts with simple, familiar tasks and moves to the more complex. They are all provided with a standard kit of medicines and supplies. This includes ORS, Co-trimoxazole, Paracetamol, Chloroquine in malarious areas, contraceptives, iron and folic acid tablets, Mebendazole and vitamin A.

To help monitor use of MCH and family planning, they are taught to make a community map on which they use colors and symbols to record the pregnancy, antenatal care or family planning status of the woman in a household and the immunization status of any infants. These are used by the CHWs and members of the community health committee to identify families that need encouragement to make use of services. In 2005, in recognition of the poor level of support and supervision being received by the CHWs, a new cadre of Community Health Supervisors was formed.

CHWs now provide a large proportion of health care. They see 27% of total outpatients. Numbers per CHW have grown by 50% in the past two years and they are unaffected by season, unlike health facilities. They provide care to 45% of sick children, and they provide 66% of public sector family planning consultations.

Concern is often expressed about the quality of care, although there is no documented observational study. An underlying cause of that concern is that 55% of female CHWs and 10% of males are illiterate. Two major in-service training programs have been started this year. The first is the Postpartum Family Planning course already described under Family Planning. This makes use of pictorial job aids. The second is on Community IMCI. This is based around an innovative set of pictorial charts covering community case management, newborn care and normal care of children less than two years.

6 Other support systems

The following sections provide brief summaries of the approaches and activities in these support system areas.

6.1 Financing of health services

After the war, in 2002, it was clear that 85% of primary care facilities were supported at least in part by NGOs. There were 65 NGOs involved, poorly distributed with no coordination or standardization of services. The MOPH technical staff were out of date in their technical knowledge and management skills or inexperienced. The decision to contract out the services to NGOs, therefore, received some but not a lot of opposition.

6.1.1 Grants to NGOs

| | European Commission | USAID | World Bank |
|------------------------------|---------------------|-------------------|------------|
| Grants | + | + | + |
| Performance-based | - | + | + |
| Contracting-out | 10 | 13 | 8 |
| Contracting-in | - | - | 3 |
| Units of contract | District clusters | District clusters | Province |
| Technical Assistance to NGOs | - | + | - |
| Technical Assistance to MOPH | + | + | + |

The three main donors were the World Bank, European Commission and USAID. (See table) All three provided contracting-out grants to NGOs. The World Bank units for the grants were whole provinces, but in the first round of grants the EC and USAID provided a greater number by clusters of districts. In the second round of grants, more were given by province, and in the third round, starting in 2009, all are given by province except for two that have been divided into two because of size. The World Bank also provided money for contracting-in grants to the MOPH in three smaller districts close to Kabul. All grants were all awarded on a competitive basis. The size of the grants reflected the sizes of the populations served, the numbers of facilities and staff, and the quantities of services performed. The World Bank made the contracts through the Grants and Contracts Management Unit (GCMU) of the MOH and made a lump sum payment to the NGOs, who could spend it as they thought best. The EC handled their contracts themselves and pay by cost-reimbursement. USAID did all the contracting through REACH in the initial round, through a strengthened GCMU with financial disbursements through WHO for the second round, and will do it completely through the GCMU for the new third round.

The grants have all been for three years. The grantees for the first round were a mix of Afghan and international NGOs. In the second and third rounds, increasing preference has been given to Afghan NGOs. All three donors provided TA to the MOPH, but only USAID provided TA to the implementing NGOs. (Almost all the new Afghan NGOs in the first round were in contracts with USAID/REACH) Since in many cases the NGOs that were receiving grants and TA from USAID were also receiving grants from the World Bank and EC, the benefits of the TA were spread more widely.

The table indicates the amounts of money spent on the first round of grants and the annual per capita costs.

| | Total population served | Total funds (\$) | Annual costs pc. (\$) |
|----------------------------|--------------------------------|-------------------------|------------------------------|
| USAID | 7,561,226 | 64,667,448* | 4.28 |
| World Bank | 4,689,300 | 47,653,014 | 4.30 |
| European Commission | 4,031,000 | 42,177,965 | 5.12 |
| ADB | 294,500 | 2,868,006 | 4.83 |
| Total | 14,991,626 | 135,757,866 | 4.40 |

*Includes costs of refresher training program and drugs supplied "in kind".

6.1.2 Drugs

Supplies of drugs, including contraceptives have been managed two distinct ways. The grants provided by the World Bank and the European Community have included money for purchase of drugs by the NGOs from local wholesalers. Drugs for the USAID grantees have been purchased by MSH and supplied to the NGOs as an "in kind" contribution based upon estimated requirements. Supplies of contraceptives for the USAID provinces have been adequate, but there have been distribution problems

by the NGOs from time to time, requiring a program of technical assistance in drug management. The three contract-in provinces managed by the MOPH have had supplies from UNFPA until this last year.

6.1.3 Performance-based Grants

The World Bank and USAID grants were both performance-based, payment in some way depending on the NGO's performance on a set of agreed targets and deliverables, including performance on reproductive health indicators. However, the approaches were very different. The World Bank grants consisted of lump sum remuneration with 100% flexibility and the possibility of a 10% of contract price as a bonus for excellent performance. One percent was awarded every six months (up to 5%) if performance had increased by 10% over the previous highest figure. An additional 5% was awarded at the end for an overall improvement of 50%.

USAID/REACH grants were performance-based in that payment can be withheld if deliverables outlined in the contract are not met. There is no bonus.

6.2 Reporting, Monitoring and Evaluation

Monitoring and evaluation of the health services has been achieved through several different means, supported by different donors.

6.2.1 World Bank Contracts

As the main method of monitoring the performance of the NGOs funded by the World Bank, a set of facility-based assessment tools was developed and implemented by Johns Hopkins University (JHU). The survey tools assessed 27 areas of care, including: patient satisfaction; availability of drugs, equipment and staff; knowledge of providers; patient-load; and the quality of provider-patient interactions. These were incorporated into a "balanced score-card" that rated facilities on a scale of 0-100. It is carried out on a random sample of facilities in each province nationwide annually, but every six months in the World Bank contract provinces. In addition, World Bank contractors are required to submit quarterly narrative and financial reports. There are periodic *ad hoc* visits by World Bank and MOH staff.

6.2.2 USAID Contracts

Quarterly reviews of deliverables by narrative and financial reports and on-site monitoring visits by REACH staff were the core of the monitoring system by REACH. Baseline, mid-term and end-of-project household surveys of ten key indicators measure project outputs. On the basis of the baseline findings, NGOs set performance targets in consultation with REACH staff. The household surveys use a Lot Quality Assurance Sampling methodology and are carried out by NGO staff. Calculation of the results of the surveys was carefully overseen by REACH staff. Additional monitoring of performance was achieved through implementation of the Fully Functional Service Delivery Point quality assurance methodology in 65% of facilities. Semi-annual round table meetings with NGO management teams as well as individual face-to-face meetings with REACH staff reviewed performance and determined additional technical assistance and monitoring needs for all or individual NGOs.

6.2.3 Comparison of indicators used by World Bank and USAID: implications for RH.

The significance of the two different approaches to performance-based financing is not clear from performance results, especially given the variety of other determining factors like geography, climate and security.⁸ However, it is worth noting the service provision indicators, and especially the reproductive health indicators that have been used in each donor’s approach.

Indicators used for monitoring World Bank and USAID contracts.

| JHU Balanced Scorecard | | REACH Household Surveys* |
|--------------------------------|--|---|
| Domain | Components | |
| Patients & community | <ul style="list-style-type: none"> • Patient satisfaction • Health committee reports | |
| Staff | <ul style="list-style-type: none"> • Staff satisfaction & salaries | |
| Capacity for service provision | <ul style="list-style-type: none"> • Indices for staffing, staff knowledge, equipment, drugs & contraceptives, lab, records and HMIS. | |
| Service provision | <ul style="list-style-type: none"> • Patient-provider care index • Proper disposal of sharp objects • Average new outpatients per month • Provision of antenatal care • Delivery care | <ul style="list-style-type: none"> • Contraceptive prevalence rate • Knowledge about contraceptives • Antenatal care • Tetanus toxoid x2 • Facility deliveries • Postnatal care • Exclusive breast feeding • DPT3 • Vitamin A • Care-seeking behavior |
| Financial systems | <ul style="list-style-type: none"> • User fee guidelines & exemptions | |
| Overall vision | <ul style="list-style-type: none"> • Use by poor and females | |

*Many of the indicators in domains other than Service provision are included in the Fully Functional Service Delivery Point quality assurance tool.

⁸ E. Sondorp, N. Palmer, L. Strong and A. Wali. Afghanistan: Paying NGOs for Performance in a Post conflict Setting. In Rena Eichler. Performance Incentives for Global Health: Potentials and Pitfalls. Brookings Institute Press, 2009.

6.2.4 Additional household surveys

A variety of household surveys have been carried out over the past six years. A MICS survey was done in 2003 and provides some good baseline estimates of service utilization. Another nationwide household survey, the Afghanistan Household Survey, was done in 2006 by JHU. This is a survey of rural communities in provinces that did not have severe security problems at the time. It included estimates of child and infant mortality for 2004 and current performance of MCH and family planning services. These two surveys have been used for data quoted earlier in this case study.

6.2.5 Health Management Information System

In 1999, the MOPH formed a task force to develop an outpatient care monitoring instrument that was implemented in 2000. In the 2002 facilities survey, almost two thirds of facilities had the recording forms, but very few of them were reaching the MOPH. After the war, since the BPHS was to be implemented by a variety of contracting mechanisms by different donors, it was clear that the MOPH needed a common system for monitoring the progress of the BPHS. During 2003 as the different task forces were defining the content of the BPHS, the HMIS Task Force developed a set of indicators to monitor all components of the BPHS. Data-collection forms were developed to collect data from health posts (a pictorial tally sheet for the CHWs) and from all health facilities implementing the BPHS. A computer system was developed allowing data to be entered and analyzed at the provincial or NGO level. It can be aggregated at the provincial or national level and analyses can easily be distributed to peripheral levels.

The system was updated in 2005 and indicators for the Essential Package of Hospital Services were included. Almost a hundred indicators are recorded by the HMIS. They have consistently been selected so that they are useful at the local level where they are collected as well as being valid and reliable and easily generated and measured. This means that indicators of maternal and newborn health and family planning can be used at local, provincial and national levels to monitor the level of services and assess accomplishment of any targets. Currently the HMIS unit in the MOPH is developing a balanced score-card analysis of quarterly submitted data that will enable monitoring of performance within and between facilities, districts and provinces as well as their performance in comparison with benchmarks.

7 Reflections: Seven years on...

- The immediate post-conflict period was a time of great opportunity for establishing new institutions, new organizational behavior in existing institutions, new expectations and priorities for health care and new policies and strategies to realize those expectations. Four or five years later, it is more difficult to introduce change.
- The early identification of the high maternal mortality rate as well as the lack of midwives in the country was very important in advocating for all aspects of women's health and securing its importance in the BPHS and the development programs of donors.

- The expectation of World Bank staff that NGOs would be able to manage health services to a whole province has turned out to be correct. However it has taken six years to fully realize that and a considerable amount of technical support and capacity-building along the way.
- During the years of war, many Afghan health professionals had missed out on international developments in health care delivery, leadership and management, and the education of health workers, so the introduction of state of the art approaches has required the provision of technical support to both central and provincial MOH staff as well as to NGOs and their staff.
- Once established, Afghan NGOs have generally performed better than international NGOs.
- It is not clear that the performance-based bonuses available through the World Bank contracts have made a significant difference on program outputs.
- Simultaneous efforts to expand access and improve quality are quite compatible.
- The establishment of a practicable HMIS is indispensable for the development of sound policies and strategies as well a good program management.
- Cultural and communications factors remain a barrier to the use of health facilities by women and children. The expansion of community-based health care and the introduction of female CHWs, in particular, have resulted in a dramatic improvement in access to child health and family planning services.
- Many challenges remain. The diminishing security situation resulting from the resurgence of the Taliban and criminal elements has had a significant effect on all services, but especially those for women. Data on insecure provinces shows that opening and maintaining facilities is more difficult, and staffing them with midwives is much more difficult.

| | Mountainous provinces (5) | Insecure provinces (8) | Other provinces * (Without Kabul)(20) |
|-------------------------------|----------------------------------|-------------------------------|--|
| Average population / facility | 12,916 | 21,088 | 15,884 |
| Average population / midwife | 17,077 | 33,213 | 15,339 |
| Midwife to facility ratio | 0.94 | 0.59 | 1.03 |
| Facility delivery rate % | 12.5 | 19.2 | 31.3 |

*Kabul province is excluded because of the bias caused by the large urban population.

However, the data on mountainous provinces show that terrain and climate continue to exacerbate the effect of culture. Even with a lower population to facility ratio and midwives in most facilities, the rate of deliveries at facilities in these provinces is much lower.