

## MEMO

**To:** Michael Greene, Director of U.S. Agency for International Development Kyrgyz Republic

**From:** Allison Reefer, Program Officer for World Health Organization Kyrgyzstan

**Date:** 24/03/2015

**Subject:** Decreasing Maternal Mortality in Batken Oblast, Kyrgyzstan through Midwife-Training Programs

### Executive Summary

Kyrgyz Republic currently has a maternal mortality rate of 75 per 100,000 live births, the highest in the Commonwealth of Independent States.<sup>1</sup> Although many of Kyrgyzstan's regions struggle with maternal healthcare, Batken oblast faces some of the most difficulties. Midwives are commonly used throughout the province, but they are rarely trained to deal with complications that lead to maternal death. Training midwives in preventative measures and providing them with incentives to use hospitals for delivery is shown to be a factor in decreasing maternal mortality rates.<sup>2</sup> We propose that USAID Kyrgyz Republic, together with WHO Kyrgyzstan and the Kyrgyz Ministry of Health, work to develop a midwife-training program in Batken province to equip midwives with skills that will prevent cases of maternal death.

### Background

#### *Maternal Death in Kyrgyz Republic*

Maternal mortality is defined as the death of a woman while pregnant or within 42 days of pregnancy termination from pregnancy-related causes.<sup>3</sup> Kyrgyzstan holds the highest maternal mortality rate in the former Soviet republics. Its position in the Tian Shan Mountains and high poverty rate (21% under \$2 a day) lead to inadequate access to and quality of healthcare.<sup>4</sup> While organizations continue to work towards better healthcare in Kyrgyzstan, maternal health is still falling behind.

#### *Maternal Mortality – Batken Oblast*

Women in Batken oblast lack access to professional maternal healthcare. Over 75% of the province's population lives in rural areas without adequate roads, and the region contains Uzbek and Tajik enclaves that make traveling difficult without visas and documents.<sup>5</sup> Child marriage and low contraceptive use are also issues that contribute to the high maternal death. Child marriage is higher among rural populations (14.2%) and poorer households (16.5%), both of which make up the demographics in Batken region.<sup>6</sup> Additionally, women in rural areas use contraceptives less often, due to traditional and religious values.<sup>7</sup> In fact, contraceptive use throughout the country declined from 60% to 36% between 1997 and 2012.<sup>8</sup> Batken had the lowest amount of contraceptive coverage for fertile women (33.3%) and one of the highest fertility rates in the country (4.4 births per woman).<sup>9</sup> Anemia among pregnant women was also high in Batken (74.6%) largely from poor antenatal nutrition, leading to several deaths.<sup>10</sup>

#### *Midwives in Batken Province*

Batken province has the highest usage of midwives, making up about 40% of antenatal care providers.<sup>11</sup> Midwives are often unequipped to provide emergency services during pregnancy, untrained in preventative measures. Lesotho, another mountainous country, trained community health workers and midwives in a variety of health services, including maternal health, in an area with similar obstacles. They also trained women to serve as links between clinics and pregnant women to increase use of professional healthcare during delivery, providing money incentives for midwives to accompany and bring their clients to the hospital.<sup>12</sup> Although training midwives alone will not necessarily decrease maternal deaths, combining training with the increased quality of healthcare that Kyrgyzstan is building in rural areas can provide better care for pregnant women.<sup>13</sup> These factors, in addition to incentives for midwives to use hospitals

in cases where emergency care may be needed, can lead to a decrease in maternal mortality for Batken region.<sup>14</sup>

## **Recommendations**

We recommend that USAID Kyrgyz Republic, in collaboration with WHO and the Kyrgyz Ministry of Health, pilot a midwifery training program in Batken oblast, Kyrgyzstan, in order to decrease instances of maternal mortality. This program will work as a training-of-trainers program, where healthcare professionals from major hospitals and from the six birth preparedness schools established throughout the country in 2011 will work with doctors, nurses, and health-clinic midwives in regional hospitals in Batken province.<sup>15</sup> These healthcare workers will be taught important emergency obstetric care measures and preventions for maternal mortality. They will also be given the resources and skills to train midwives in the villages about preventative measures, clean delivery, and the importance of professional emergency services during pregnancy. The training-of-trainers program will help with the sustainability of the project by ensuring that the regional health centers have the knowledge and resources to train any new midwives and perform the services through their own clinics.

Because clean delivery kits are a key part of reducing maternal mortality, each of the health centers will be given these kits to pass out to midwives who go through the training.<sup>16</sup> By giving midwives clean delivery kits and teaching them how to use them and keep them clean, women will be at less risk for infection or accidents during delivery. Additionally, some emergency care techniques will be taught, but most of these will be handled by professional health clinics. Through the training program, hospitals will also be provided with a fund to provide compensation to midwives for bringing their clients into the hospital for delivery, especially in the case of emergencies.<sup>17</sup> While this program cannot and should not replace midwives, it can help incentivize the use of professional emergency obstetric care, which is shown to significantly reduce instances of maternal mortality.<sup>18</sup>

Because there are many factors that can contribute to maternal mortality, these trainings will focus on the ones most preventable by health centers. Adequate diet and nutrition for pregnant women will be a key component of the curriculum, as will proper antenatal counseling techniques. Clean delivery techniques will also be a component so that healthcare providers and midwives can prevent post-partum infections, a major cause of maternal mortality. Other causes of maternal mortality are often due to pregnancy-aggravating, pre-existing diseases, so skills in disease-management during pregnancy should be taught. Hospital staff will be trained in major obstetric emergencies, as well as how to communicate with midwives about these issues. In the trainings, midwives should be encouraged to bring women to the hospitals prior to delivery if any complications arise. Through the curriculum, the incentives for using professional care, and the clean delivery kits for midwives, Batken province can work to decrease maternal mortality throughout the region.

## **Limitations**

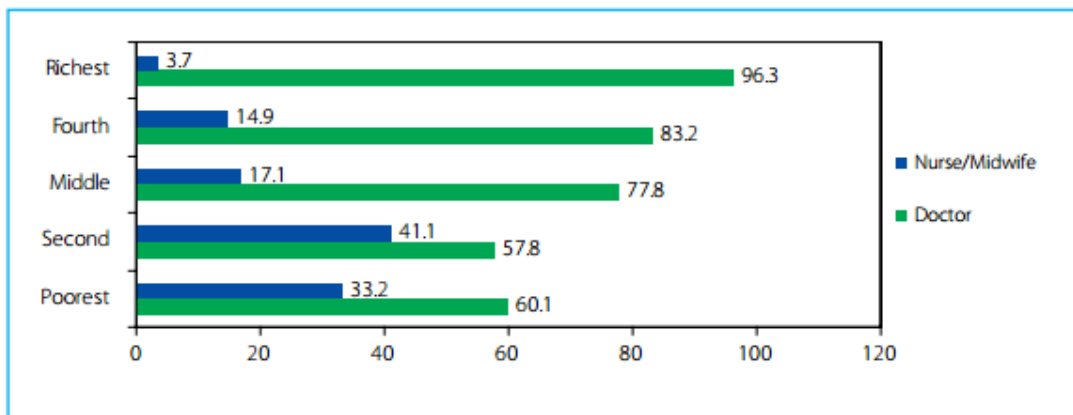
The primary limitation to this program is funding. This burden is lessened by the fact that the program is a pilot project. Quality healthcare is also a high priority for Kyrgyz Republic and the organizations working there, so funding for healthcare initiatives is generous.

Another possible limitation is infrastructure in the region; however, existing healthcare initiatives are working to increase access to professional health centers, so this project will work in conjunction with those programs to increase access and quality of maternal health services.<sup>19</sup>

Table 1.6: Antenatal care in Kyrgyzstan 1997- 2006

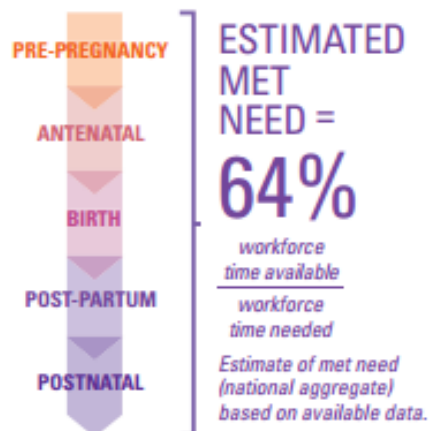
	Any skilled	Doctor	Nurse/midwife trained
Kyrgyzstan, 1997	97.5%	65%	32%
Kyrgyzstan, 2006	97%	85%	11%
Urban 1997	99%	92%	6%
Urban 2006	99%	95%	4%
Rural 1997	97%	58%	39.5%
Rural 2006	95%	79%	16%

Figure 1.12: Percentage of deliveries assisted by doctor or nurse/midwife according to household wealth index. Kyrgyz Republic. 2006<sup>5</sup>



**WORKFORCE AVAILABILITY (2012)**

	Country classification of staff working in MNH <sup>1</sup>	Time spent on MNH %
Midwives	2,277	100
Midwives, auxiliary	na	na
Nurse-midwives	na	na
Nurses	na	na
Nurses or nurse-midwives, auxiliary	na	na
Clinical officers & medical assistants	na	na
Physicians, generalists	1,729	30
Obstetricians & gynaecologists	1,002	100



\*Infographic sources: UNICEF, Integreare.<sup>20</sup>

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- <sup>3</sup> World Health Organization. (2015). Maternal mortality ratio. *WHO Programmes*. Retrieved from <http://www.who.int/healthinfo/statistics/indmaternalmortality/en/>; World Bank, 2014, Maternal mortality ratio.
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- <sup>5</sup> National Committee on Statistics. (2009). Population and Housing Census 2009, Book 3. *Provinces of Kyrgyzstan: Batken Province*. Retrieved from [http://en.wikipedia.org/wiki/Batken\\_Region#cite\\_note-stat-1](http://en.wikipedia.org/wiki/Batken_Region#cite_note-stat-1).
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- <sup>10</sup> UNDP, 2013.
- <sup>11</sup> DHS, 2012.
- <sup>12</sup> Partners in Health. (2011). Reducing maternal mortality in the remote mountains of Lesotho. *Partners in Health*. Retrieved from <http://www.pih.org/blog/reducing-maternal-mortality-in-the-remote-mountains-of-lesotho>.
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- <sup>15</sup> USAID. (2011). Six birth preparedness schools established in Kyrgyzstan. *Quality Health Care Project*. Retrieved from <http://www.qhcp.net/en/2011/12/six-birth-preparedness-schools-established-in-kyrgyzstan/>.
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