

London, 5 May 2011 - Where is the most dangerous place for a woman to give birth? No one can say for sure but the far northeastern corner of Afghanistan seems a likely bet.

It's well known that Afghanistan is the riskiest country to be an expectant mother - one in 11 women will die giving birth. But in Badakhshan province maternal mortality rates are several times higher than the national average.

Now one aid agency wants to find out why. Health charity [Merlin](#) is exploring whether one factor could be a vitamin D deficiency, partly due to women living in purdah – largely confined to their home and heavily veiled if they go out.

A striking feature about the sky-high maternal mortality rate in Badakhshan is that a third of these women are losing their lives simply because they cannot get their babies out. Yet worldwide, this problem only accounts for 8 percent of maternal deaths. Clearly something is going on.

Merlin says a diet low in calcium and a lack of vitamin D, which is generated through exposure to sunlight, could be contributing to pelvic bone deformities, which means the baby gets stuck.

Women who have what doctors call obstructed labours often die from a ruptured uterus if they do not receive prompt medical help. In most cases the baby also dies.

Merlin, which is already addressing other issues behind Badakhshan's alarming maternal mortality rate, is hoping to carry out research into vitamin D levels in expectant mothers.

Lizzy Berryman, Merlin's health adviser for Afghanistan, said a study published in the Lancet medical journal showed 30 percent of maternal deaths in the province were caused by obstructed labour.

"I've never seen obstructed labour percentages like this before ... We definitely want to see why it is so high in this area," she told AlertNet.

"There's the possibility you're looking at vitamin D deficiency because it would cause bone deformity and soft bones and you might end up with a high risk of a contracted pelvis.

"It's nothing we can confirm. It just seems an obvious possibility and it's something we want to follow up."

EARLY MARRIAGE

One major factor behind the region's high maternal mortality rate is a lack of midwives and limited access to healthcare. Badakhshan is a mountainous province with few roads meaning women often have to travel for days on foot or by donkey to reach medical help.

Merlin now runs 25 mobile health teams in the province, each with a birth attendant, who can travel to far-flung villages by donkey.

Other key factors behind the high maternal death rate include women's low education and literacy levels, poor nutrition, early marriages and multiple closely-spaced births.

Berryman said many girls had their first pregnancies when they were under 15, before their pelvises were fully developed, and poor nutrition meant they were often stunted.

"There needs to be a lot of work on the promotion of female education and nutrition and also family-planning so women have the ability to space and control pregnancies ... and so that both men and women understand the importance of delaying first pregnancies," she added.

Badakhshan's high maternal mortality rates were first highlighted in 2005 when the Lancet published research carried out in 2002 showing 6,500 women were dying for every 100,000 live births – more than three times the national average at the time.

Afghanistan's national rate has since dropped to 1,400 deaths per 100,000 live births. Merlin believes the rate has also probably improved in Badakhshan, but there are no recent figures.

Berryman said Merlin's research, which is dependent on funding, would probably involve measuring vitamin D levels, taking ultrasounds to see how many women's pelvises are contracted and looking at issues including literacy, age at marriage, number of births, access to community midwives and the time it takes to reach a hospital.

Aside from its mobile clinics in Badakhshan, Merlin has also set up midwifery schools in two other northeastern provinces, Takhar and Kunduz, which are training women to become midwives on the proviso they return to their local communities to work.

Source: [Alert Net](#)