

Frequent antenatal screening dramatically reduces maternal mortality on Thai-Myanmar border

July 18 2012

Frequent antenatal screening has allowed doctors to detect and treat malaria in its early stages on the border of Thailand and Myanmar, dramatically reducing the number of deaths amongst pregnant women.

In an analysis of 25 years' worth of data, in 50,981 women, from antenatal clinics at the Shoklo [Malaria](#) Research Unit, researchers found that the number of deaths from *Plasmodium falciparum* malaria fell from an estimated 1,000 deaths per 100,000 pregnant women before the introduction of screening to zero in 2005.

The Shoklo Malaria Research Unit is part of the Wellcome Trust-Mahidol University-Oxford [Tropical Medicine](#) Research Programme, based in the refugee camps on the border of Thailand and Myanmar. It is situated in a region where malaria is endemic.

Researchers at the Unit studied all medical records from women attending its antenatal clinics from May 1986 to the end of 2010 to assess levels of [maternal mortality](#). A significant [disparity](#) exists in maternal mortality between women living in the least developed countries and those living in [industrialised countries](#): a study in 2005 estimated that the average [lifetime risk](#) of dying from complications related to pregnancy or childbirth was 300 times higher in the least developed countries. Even less well documented is maternal death in amongst high risk groups such as migrants and refugees.

In findings published today in the journal *PLoS ONE*, researchers at Shoklo found a six-fold decline in maternal mortality from 499 in the period 1986-1990 to 79 in the period 2006-10 amongst refugees. A significant proportion of this reduction in deaths was due to the early detection and treatment of malaria.

Dr Rose McGready from the Shoklo Malaria Research Unit says: "We have seen a massive reduction in malaria-related maternal mortality. This gives us hope and shows that deaths from malaria are preventable. Even though treatment options for pregnant women infected with malaria are limited, frequent antenatal screening clearly works and as such, we believe it should play a larger role in tackling the disease. However, there are still significant rates of [maternal death](#) in the more mobile migrant populations and this is something that needs to be addressed."

Alongside malaria-related deaths, the most common causes of death amongst [pregnant women](#) were haemorrhage and sepsis (infection of the blood).

"Clearly haemorrhage and sepsis need to be tackled as overall mortality remains high, despite advances against malaria," adds Dr McGready. "Delivery with trained midwives rather than at home is likely to have a significant impact, but access remains a problem for migrant women. More outreach to these women during or before their pregnancy will be needed."

More information: McGready, R et al. Effect of early detection and treatment on malaria related maternal mortality on the north-western border of Thailand 1986-2010. *PLoS ONE*; 18 July 2012.

Provided by Wellcome Trust

Citation: Frequent antenatal screening dramatically reduces maternal mortality on Thai-Myanmar border (2012, July 18) retrieved 9 May 2024 from

<https://medicalxpress.com/news/2012-07-frequent-antenatal-screening-maternal-mortality.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.