

## Way forward in PNG's maternal mortality crisis

After walking for eight hours, a woman bleeds to death with a newborn child in her arms at the entrance of Goroka hospital in Papua New Guinea. She dies because she doesn't have 10 Kina (A\$5), the hospital's admission charge.



This death at Goroka occurs in spite of national policy that states that all maternity care should be provided free of charge. But if hospitals failed to charge patients, they would have even less capacity to care for them.

This is the desperate situation of maternal mortality that PNG faces, a crisis that continues to cripple the country's health system.

A wet and dreary October morning in Port Moresby marks the beginning of a one-week workshop with representation from all Papua New Guinea's midwifery teaching institutions, health department and other stakeholders.

This was the third visit by World Health Organisation (WHO) consultant and Charles Darwin University Associate Professor – Child Health, Sue Kruske, to help to address the desperate situation of maternal mortality experienced by Australia's northern neighbour.

To say the country's maternal services are in a poor state would be an understatement of epic proportions.

In 2008, a number of events occurred in PNG that highlighted the escalating problems within the country's maternal services. The most significant was the release of maternal mortality estimates contained in the latest Health Demographic Survey results which indicated a more than twofold increase in the PNG maternal mortality rate from 370 to more than 730 per 100,000 in the past 10 years. The estimates rank PNG among the worst in the world for maternal mortality.

It was Dr Kruske's assignment to help stakeholders to improve the quality and content of the midwifery curricula across four teaching schools involved in midwifery education in PNG.

In December 2006, Dr Kruske led a comprehensive review of the country's midwifery education. A total of 30 recommendations were made to improve both quality and content. A new curriculum across the four schools was among the recommendations.

The following year, she returned to develop the new curriculum, based on the international WHO curriculum, and dramatically redesign the current programs across the country. Major changes included separating pediatrics from the midwifery program, increasing the midwifery content and increasing the duration from 44 weeks to 52 weeks.

This draft curriculum was left with the schools to modify to their own needs. However, with the exception of one which implemented minor changes, there were limited resources to apply the new program across the schools, she said.

When the latest maternal mortality figures were released in 2008, Dr Kruske was invited to continue developing the new curriculum. This involved designing and developing eight new subjects that included both the traditional components of midwifery practice and contemporary material considered essential for effective midwifery practice in PNG. New material included public health, epidemiology and the sociological influences of maternal health and well-being.

"The quality of education provided for the preparation of midwives has a major influence on the ability of health

services to provide skilled care for women in pregnancy, childbirth and the postnatal period,” Dr Kruske said.

Currently, there are insufficient midwives in PNG and the number being trained still won't come close to addressing the workforce shortages.

With so many contributing factors to the poor state of maternal and child health in PNG, a workable solution seemed almost impossible, she said. “Women have very poor status in the country, particularly in rural areas. Infectious diseases such as HIV are reaching endemic proportions and the health service infrastructure has slowly been eroded in the past 30 years. Stakeholders estimate that up to 50 per cent of rural health facilities have closed in the past 30 years.

“Poor maintenance of health facilities has affected the ability to attract and maintain staff, and provide high-quality and safe care.

“Even essential medical supplies and equipment were often unavailable even though the central warehouse had supplies available.”

Dr Kruske said many women did not have access to health services for care during pregnancy and childbirth because of their geographical isolation.

PNG is ruled by its geography, with only a handful of bone-jarring, snaking roads crossing the mountain ranges to link key centres. Electricity and sewerage services struggle to reach even large towns, and lack of infrastructure dictates that 85 per cent of the population still eke out a living as subsistence gardeners.

For millennia before the arrival of Western civilisation, tiny populations were hidden from one another in walled-off river valleys or clinging to treacherous mountain slopes, fighting fiercely against their neighbours. This caused thousands of unique communities to evolve, each with their own rich customs, traditions and languages.

Today, more than 800 distinct languages are spoken in PNG, around one-third of the world's total, and most are spoken by only a few hundred people.

The Highlands were the final frontier of PNG to succumb to Western exploration and many of the elderly still remember the customary lifestyles they led before being introduced to Europeans, coffee plantations, Coca Cola and Christianity. Within one generation, these people witnessed the transition from stone axes, digging sticks and grass huts to four wheel drive vehicles, satellite communication and the Westminster system of government.

Providing health care to such a fragmented and diverse population has always been difficult, and indicators of PNG's health status, such as child and maternal mortality rates, have consistently rated among the bleakest in the world. In the 1960s, 20 per cent of children born in PNG died before their fifth birthday, Dr Kruske said.

“But impressive improvements were made in the 1960s and 1970s. An efficient health outreach program was established with aid posts in remote areas staffed by health extension

officers who administered basic medicines and care.”

Maternal and child health patrols regularly walked to remote villages to provide education, antenatal care and vaccinations. By 1982, 93 per cent of the population lived within a two-hour walk of a health care facility and the child mortality rate had nearly halved from 20 per cent in 1960 to around 11 per cent.

But progress in PNG's health status has declined over the past 30 years.

#### text

Richie Hodgson

#### photographs

Courtesy Associate Professor Sue Kruske

Progress in PNG's health status has declined over the past 30 years.

To reverse this trend, a Ministerial Taskforce on Maternal Health has been established and is reviewing a large number of submissions before making recommendations to the Minister on a proposed way forward.

The one-week workshop in Port Moresby during October 2008 offered a holistic approach to addressing PNG's maternal mortality crisis.

“Considerable work remains to develop readings, lectures and various other teaching materials,” Dr Kruske said.

“It is estimated that, of the new curriculum, approximately 60 per cent can be sourced in existing materials, but these materials require full revision and updating.

“The remaining 40 per cent consists of new material and teachers have identified that they do not have the capacity to introduce this new material without assistance.”

There is now a high-quality, contemporary, PNG-contextualised midwifery curriculum available for implementation across PNG. If implemented carefully with the correct support and realistic timeframes, Dr Kruske said she expected significant improvement in the quality of midwives graduating.

#### far left above

Sulpain Passingan, from PNG's Department of Health, and Dr Sue Kruske at the Bomana War Cemetery.

#### far left below

A typical postnatal ward in PNG offers sub-standard facilities for mothers and their babies.