



Improving the Quality of Hospital Care for Children in Papua New Guinea: - Disseminating changes to Policy and Practice: A pilot training course in West New Britain

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Key Messages:

- > Distribution of clinical guidelines is not enough for health workers to have an impact on child deaths. Most health workers do not intuitively know how to use guidelines in daily clinical practice.
- > Participatory, practical, and interactive courses in the use of the WHO Pocket Book of Hospital Care for Children have successfully been completed in Solomon Islands, Lao, Fiji and now specifically adapted to PNG
- > The course - which aims to teach health workers how to use guidelines in everyday clinical practice - provides an opportunity to disseminate information to health workers on recent changes to policy and practice, and to teach an holistic problem-solving approach to quality improvement.

- Improving oxygen systems in all provincial and district hospitals. Since 2005, oxygen systems have been set up in all 18 provincial hospitals and 5 district hospitals
- Improving hospital care is just one component of PNG's overall approach to improving child health and reducing avoidable deaths. Other areas are outlined in the 2009-2020 Child Health Plan.

The WHO Pocket Book of Hospital Care

The WHO Pocket Book of Hospital Care for Children has been distributed in PNG since 2006. It provides information on the management of common causes of child deaths, and a guide to the processes of care for all sick children. It compliments the PNG standard treatment approach. The 2009-2020 PNG Child Health Plan aims for the Pocket Book to be distributed to every provincial and district hospital, and for training for hospital clinicians in the use of this book.

Distribution of guidelines is not enough for them to have an impact on child deaths. It is evident that health workers in district and provincial hospitals do not intuitively know how to use guidelines in daily clinical practice.

From August 29th to September 1st a pilot training workshop in hospital care for children was run at Kimbe General Hospital. This workshop was supported by the PNG National Department of Health (Family Health Services Branch), the Paediatric Society of PNG and the AusAID Knowledge Hub for Women's and Children's Health, through the Centre for International Child Health in Melbourne.

The 4-day training course has been successfully used in Solomon Islands, Lao, Fiji and other countries, is now specifically adapted for PNG. The training materials are available on a CD-ROM, developed by the Centre for International Child Health in Melbourne.

The course was participatory, practical, interactive and fun. It aimed to teach health workers how to use the Pocketbook in everyday clinical practice and how to find information in the guidelines when needed.

Background

The Death rates for children from common illnesses are high in many hospitals in Papua New Guinea. In 2010 the PNG Paediatric Hospital Reporting System documented case fatality rates in some hospitals to be 2-3 times the national average, and 3-4 times that of low mortality hospitals. While some of the high death rates will be due to circumstances prior to hospital presentation, the quality of hospital care is also important to reducing avoidable deaths. The PNG National Child Health Plan calls for a multi-faceted approach to improve the quality of care for sick children in PNG. This includes:

- Continuing to increase the training of paediatricians, building skills in child health in all the provinces
- Training on the WHO Pocket Book of Hospital Care for Children for nurses and doctors in all provinces in 2011-2013
- Increasing the number of child health / paediatric nurses
- Introducing a standardised system for recording and reporting case fatality rates for common illnesses in all hospitals: **The Paediatric Hospital Reporting System**

It communicated a system of care appropriate for all sick children at hospitals: the processes of which are triage, emergency treatment, history and examination, diagnosis and secondary diagnoses, monitoring and supportive care, discharge planning and follow-up. Many of these processes of care – particularly triage, emergency treatment, monitoring and supportive care and follow-up are poorly done in most hospitals, and few hospitals have systems that include all these steps.

This program compliments the Integrated Management of Childhood Illness training program, which is focused on improving primary and community care by nurses and community health workers. It is part of a continuum of standardised treatment from community to primary health clinic to hospital for the sickest children.

The course offers an opportunity to teach health workers about changes to policy and practice, such as new anti-malarial treatment and rapid diagnostics. Because the training is done in provincial hospitals for staff, and the materials are all on a CD, the course is low cost.

Choosing target hospitals

The PNG Paediatric Hospital Reporting System, a system of standardised reporting of case fatality rates for common illnesses, introduced in 2009, has identified marked variation in death rates between hospitals. Several hospitals have concerning high case fatality rates for pneumonia, malnutrition, neonatal conditions, meningitis and septicaemia. The PNG National Department of Health has targeted these high mortality hospitals to begin this training to improve hospital care.

The first location chosen was Kimbe General Hospital, in West New Britain Province, where mortality rates for common illnesses are 2-3 times that of the national average:

Condition: Case fatality rate in Kimbe in 2010 (national average)

Pneumonia: 15.3% (5.6%), Severe pneumonia: 35.1% (17.6%),

Severe malnutrition: 38.9% (21%), Meningitis: 23.5% (22%), TB: 14.9 (11%)

Neonatal: 17.4% (9.4%) Diarrhoea: 1.4% (2.7%)

The Workshop in Kimbe

The training course in West New Britain province involved 17 nurses, 2 community health workers and 3 doctors. They represented all areas of the hospital where children are cared for: the children's ward, the emergency department, children's outpatients department, the special care nursery and the surgical ward.

This pilot course involved, as facilitators, nine PNG paediatricians, representing each of the four regions in the country. The course was successful, the material was relevant and pitched at the correct audience awareness level, and there was positive feedback from the participants and facilitators.

The course provided an opportunity to disseminate information to health workers on policy changes in the last 5 years, including fixed-dose combination therapy for TB, new treatment (artesunate and artemether-lumefantrine) for malaria, and rapid diagnostic tests.

None of the course participants had received any training on these new areas previously, despite there being donor-funded vertical training programs to do so (such as the Global Fund supported program to train all health workers in rapid diagnostic tests for malaria). This highlights that these heavily funded vertical programs have failed to reach rural areas, and in contrast highlights the value of holistic broad based training that will improve overall health workers skills and knowledge.

Expansion in 2011-2013

Based on this pilot course, further training in the higher mortality hospitals is proposed for the next 12-24 months. Each workshop will be facilitated by 2 or 3 of the paediatricians involved in the Kimbe workshop, along with a local paediatrician where there is one. In the next 12 months this training will be conducted in Wabag, Mendi and Madang, where mortality rates are 2-3 times higher than the national average for many common illnesses.

The paediatricians involved in the Kimbe training will conduct training in their own provincial hospitals, so by the end of 2012 it is envisaged that at least 10 provincial hospitals will have received the training in improving the quality of hospital care. By 2013 all hospitals in PNG would have received this training.

The PNG Paediatric Hospital Reporting System provides an accurate mechanism for understanding the effect of this training and other interventions on quality of care and outcomes in provincial hospitals. Death rates for pneumonia, diarrhoea, will be monitored in these hospitals, malnutrition, meningitis, neonatal conditions. Regular reports will be supplied to the National Department of Health's Child Health Advisory Committee, and to supporting agencies.

For further information on this briefing paper and the courses, please contact: Trevor Duke on Trevor.Duke@rch.org.au

For further information and resources contact: www.wchknowledgehub.com.au

A strategic partnerships initiative funded by the Australian Agency for International Development

