

# Using Research to Inform Policy and Practice: A story from Kenya

Since 1990, child mortality for under-fives has decreased by 56%. However there is still much work to be done: in 2016, 5.6 million children across the world died before reaching their fifth birthday<sup>1</sup>. Improving the quality of paediatric care in hospitals is one way of addressing what is still a significant challenge.

In 2002 the KEMRI-Wellcome Trust Research Programme (KWTRP) began conducting research on the state of pediatric care for children and newborns in multiple district hospitals across Kenya. KWTRP is a collaboration between KEMRI (the Kenyan Medical Research Institute), Oxford University and the Wellcome Trust. Its aims are to conduct research on major causes of morbidity and mortality and to train Kenyan and African research leaders to advance health research on the continent.

The findings of the KWTRP research study, published in 2004, were stark. They showed that in the hospitals studied few health workers had

read any existing World Health Organisation (WHO) guidelines on managing serious infections and malnutrition amongst infants and newborns, even though these had been informed by the results of earlier research by KWTRP and other groups. As one senior researcher in the KWTRP team remarked: *"It raised the question of the value of what we are doing if our research is not reaching the intended beneficiaries, the newborns and children with severe illness who need care in hospitals."*

After discussion with hospital paediatricians and those responsible for child health in the Ministry of Health (MoH), the KWTRP team decided to develop a set of Kenyan guidelines for paediatric care using all available evidence. In addition, they concluded that the best way to develop and share these guidelines would be to actively engage with multiple local stakeholders instead of relying on traditional dissemination strategies.



Working group discussions with the Clinical Information Network

Photo credit: KEMRI-Wellcome

<sup>1</sup> <https://www.who.int/news-room/fact-sheets/detail/children-reducing-mortality>

## How Change Happened

Building on a strong existing platform of clinical research, in 2005 KWTRP established a small team in Nairobi to lead the development of the guidelines. The team began by engaging with the Ministry of Health, the University of Nairobi and the Kenya Paediatric Association. As in many countries, the Kenyan government's Ministry of Health (MoH) is responsible for national guideline recommendations for hospitals, so its involvement was critical. The University of Nairobi is the largest medical school in Kenya, so embedding the guidelines in training for future paediatricians would increase the chances of their uptake and use. The Kenya Paediatric Association aims to promote professional excellence in paediatric care and provides professional support and networking, helping to create local ownership of clinical recommendations. In parallel to this engagement with Kenyan stakeholders, KWTRP continued to engage with the WHO and make contributions to its global guidance which was published in 2005<sup>2</sup>.

The activities of this early multi-stakeholder group comprised a mix of 'research' and 'non-research' elements, occurring between 2005 and 2009. The research activities began in 2005: the team led a series of contextualised systematic reviews of the evidence for best practices for managing severe forms of major childhood illnesses. The KWTRP team then convened the first "child evidence week" to discuss the findings with 30 key national stakeholders and draft a first set of national clinical guidelines on paediatric care.

In a linked process, in 2006 the KWTRP team developed a week-long training course for hospital clinicians and nurses, aimed at translating the national guidance into practice. Subsequently, over a period of 2.5 years, the KWTRP team collaborated with national partners to test whether combining guideline dissemination with training, intermittent audit and feedback, and supervision and facilitation could change practices in routine hospital settings.

While securing funding for the research elements of this engagement work was successful, it was much more difficult to get funding for continuing the 'non-research' stream of work. The latter included progressively updating and improving guidelines, training and wider dissemination. Few funders then saw the value of this sort of engagement, but the team believed it was essential to ensure that guideline development continued to be participatory and inclusive, and to disseminate the idea that using guidelines should become the norm for clinical practice. Without dedicated funding, the KWTRP team had to fit this work around their funded research. They did this by working with MoH staff and the Kenya Paediatric Association to transfer capacity for conducting practitioner training to these institutions. Responsibility for training the University of Nairobi's students was progressively transferred to a team from the university who have sustained this training independently since 2013. The work of the Kenya Paediatric Association and university received important funding from the UK's Royal College of Paediatrics and Child Health, to support a small part-time team coordinating training and disseminating guidelines. This also helped spread the work to neighbouring countries.

## Impact

The new Kenyan national guidelines on paediatric care (Basic Paediatric Protocols) were first published in 2006. They were well received by health policymakers, practitioners and students, with more than 50,000 copies distributed in Kenya. The guidelines are now in their 4<sup>th</sup> edition, having been revised in 2010, 2013 and 2015 to incorporate additional research involving multiple local practitioners. Demand for the guidelines remains high amongst health workers and students, and they are now available as an app. The inclusive approach to developing guidance with national stakeholders, and the associated training, also generated interest in other settings. In 2010 the second child health evidence week included Ugandan and Rwandan participants; adapted versions of the guidelines were subsequently produced for those countries. Since then, the guidelines and training have been introduced in multiple countries including Ghana, Myanmar, Sierra Leone, Somaliland, Zambia and Zimbabwe.

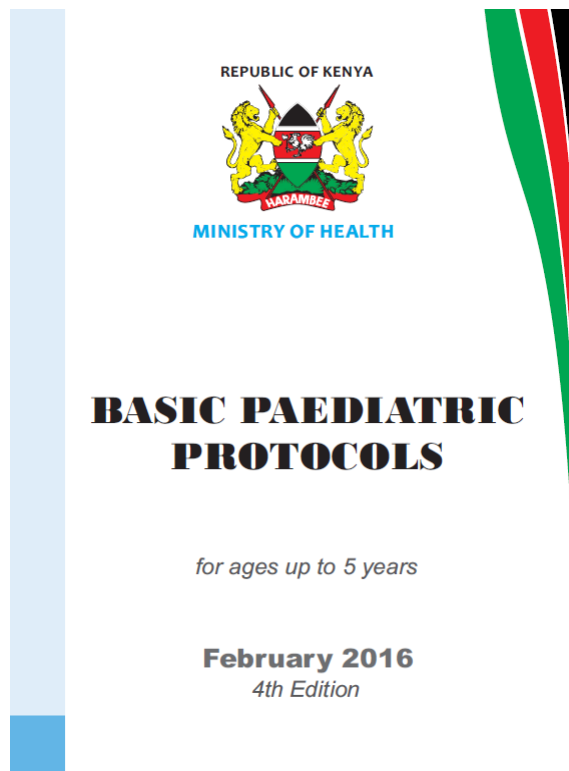
An unexpected consequence of the guidelines was a change in the attitude of Kenyan paediatricians towards evidence more generally. KWTRP, the University of Nairobi and the Kenya Paediatric Association have all observed that health practitioners now ask for more evidence to aid routine decision-making such as adopting a new policy or using a new drug. As KWTRP senior researcher Mike English noted: *“The fact that people have participated in a rigorous process of assessing what the evidence is makes them realise how valuable it is to them in their context. This has created a much wider appreciation of what it means to create evidence based guidance. And I think in paediatrics in Kenya that has almost become a norm.”*

## Next Steps

The guidelines have been widely adopted and represent a notable success for both the KWTRP team and the Ministry of Health. The inclusive and participatory way in which they were developed played a key role in ensuring that they were seen as a Kenyan product addressing Kenyan needs. As Mike English noted: *“They are not KWTRP guidelines: they are national guidelines.”* The KWTRP team thought creatively about how to make best use of local resources; sharing the work with a range of local institutions to ensure that students, policymakers and practitioners would all see long-term benefits from the guidelines. The team learned valuable skills about how to identify country-led strategies and support the research-policy-practice links needed to develop and embed them. KWTRP has since developed its own policy engagement strategy to integrate this approach into the core functioning of the programme.

## Background to the KEMRI-Wellcome Trust Research Programme

The KEMRI-Wellcome Trust Research Programme was formed in 1989 through a partnership with the Kenya Medical Research Institute, Wellcome Trust and the University of Oxford. The Programme has grown from a small group of 12 to a facility that now hosts over 100 research scientists and 700 support staff working across Kenya, Uganda and the region. The programme conducts integrated epidemiological, social, laboratory and clinical research, with results feeding into local and international health policy.



Credit: Ministry of Health, Kenya