Between 2000 and 2010, the number of women dying in childbirth fell by 47 per cent. This progress is a reflection of international research, policy making, advocacy campaigns and on-the-ground initiatives. In order to continue in this vein, Millennium Development Goals (MDGs) 4 and 5 have aimed to reduce the under-five mortality rate by two-thirds and the maternal mortality rate by three-quarters (between 1990 and 2015), respectively
RESEARCH ROUNDTABLE

Q:

This year marks the end of the MDGs. How has your research and/or organisation contributed towards these endeavours? In your view, what are the most pressing issues that still need to be addressed in the fields of child and maternal health?

DR KARIN HAMMARBERG
[Monash University, Australia]

Mental health has only recently gained recognition as a determinant of maternal morbidity and mortality in resource-constrained settings. Our research in rural Vietnam contributed to the first systematic review of international epidemiological evidence which demonstrated that there is a much higher prevalence of common mental disorders such as depression and anxiety among women who are pregnant or have recently given birth in low- and lower-middle income countries than in high-income countries. In fact, risk is highest among the poorest women with the least access to services.

Women with mental health problems are significantly less likely to adopt health-promoting practices like taking essential micro-nutrient supplements during pregnancy. Both mental health problems and nutritional deficiencies have adverse effects on early childhood development in these settings. While in high-income countries pregnancy-related suicide rates have declined because of the increased availability of contraception, affordable and accessible pregnancy termination services and reduction in the stigma associated with ex-nuptial births, this is not the case worldwide. Where data are available, they indicate that suicide makes a substantial contribution to maternal deaths. In recent reviews, suicide was identified as the leading cause of maternal deaths in Nepal (16 per cent) and in seven provinces in Vietnam (8 per cent, but up to 16.5 per cent in other provinces).

Demonstrating the growing recognition of its importance, The Maternal Health Taskforce in the Department of Global Health and Population at the Harvard T.H. Chan School of Public Health and the Woodrow Wilson Centre for International Scholars recently convened a webcast policy dialogue called ‘Integrating Mental Health into Maternal Health Programs’ (http://bit.ly/WilsonCenter). There is also a call for posts for the ‘Mental Health, the Missing Piece in Maternal Health’ blog series (http://bit.ly/MHTFBlog). Maternal mental health was not explicitly identified in the MDGs, but we believe that it is an essential indicator of maternal morbidity and mortality and should be included in the UN’s Sustainable Development Goals with clearly identified targets within any initiatives to improve maternal health and early childhood development.

ROS DAVIES
[Women and Children First (UK)]

Internationally, our work has contributed most directly to MDGs 4 and 5, as we have reduced newborn and maternal mortality rates in various countries within Asia and Africa. We’ve also contributed to MDG 1, as improved health is correlated with a reduction in poverty, which results in less stress on the family budget and more productivity. Our efforts have also strived towards MDG 3, as our women’s groups contribute to women’s empowerment.

As well as aiming to improve maternal and newborn health and reduce mortality, we’ve worked with our partners in Asia, Africa and the UK to hold governments at all levels accountable for maternal and newborn health policies and funding. We have also been engaged in building our local partners’ capacity to carry out analyses and deliver advocacy whether that be through grassroots community structures or the local organisation networks at district or national levels.

Prior to, during and after the 2010 general election in the UK, we successfully led what is now known to be the Manifesto for Motherhood coalition, which comprised over 20 UK-based international NGOs, professional associations and civil society networks. Working together with this coalition, we increased the UK Government’s support for mothers’ and babies’ health in developing countries and got cross party support to influence the UK’s International Department for Policy for Reproductive, Maternal and Newborn Health, which was called Choices for Women.

The mantra is that political commitment is vital to ensuring that in each country there are appropriate policies in practice and that there’s adequate funding for maternal and newborn health at national levels. In turn, this leads to an opportunity to improve and strengthen the health system. Although a great deal has been accomplished in the last 15 years during the MDGs, there is still a lot to be done. One of the main issues is the lack of resources available, especially in developing countries. In terms of awareness, it’s really important to ensure that the community – including male members of the family – can recognise the risk factors associated with maternal and newborn health issues. Infant mortality rates remain stubbornly high, which is very much related to poor maternal health, so a focus on both is important.
Dr Audra Gollenberg & Dr Kim Fendley
(Shenandoah University, USA)

We aim to partner with high-risk communities to better understand how and why disparities in maternal and infant health still exist in the US across socioeconomic, racial/ethnic and geographic lines. Collaborating with high-risk communities aids us because the results of the ‘how and why’ are implemented directly into community-appropriate, culturally-sensitive actions that have the potential for improving maternal and infant health.

It is addressing these disparities that remains the greatest challenge in moving forward to achieve success in reducing maternal and infant mortality in the developed world. While underdeveloped and developing nations generally have the greatest maternal and infant mortality rates, the US lags behind other developed nations in achieving this goal. We seek to better understand the barriers to realising decreases in these deaths and further implementing programmes that specifically address the unique needs of diverse communities. We hope that successful local research and programming can network into wider, comprehensive change.

Professor Jonathan Carapetis
(Telethon Kids Institute, Australia)

My personal research has been very much focused on some of the MDGs, such as better understanding vaccine-preventable diseases – including pneumococcal infections – and how to use vaccines more effectively to prevent some of the major killers of kids in developing countries, including pneumonia, bacteraemia and streptococcal diseases.

I’ve also studied chronic diseases. In Africa, the vast majority of heart disease cases in women of child-bearing age are due to rheumatic heart disease. Through MDG 5, we started to explore its impact on maternal mortality. In Africa, about a third of maternal mortality cases are due to ‘indirect’ causes; in other words, they are related to a condition the mother has that might lead to death in pregnancy but is not specifically caused by the pregnancy. The majority of those causes are heart disease. We’re just starting to get a clearer picture of this, and it looks like the burden of maternal mortality due to rheumatic heart disease could be the reason for 10-20 per cent of maternal deaths in places like sub-Saharan Africa, so now we’re actively working with our collaborators on the ground to try to understand this better. We’re also looking at maternal mortality in Australia in an endeavour to devise practical approaches to preventing deaths from rheumatic heart disease.

The Telethon Kids Institute, more broadly, has had a big focus on respiratory diseases. We’re one of the best respiratory research teams in the world, and a lot of our work is related to understanding the impact of immunisation on childhood respiratory disease. This also involves looking at emerging problems like allergy, asthma and diseases of prematurity such as premature lung disease. Some of my researchers and I work directly on child health issues in developing countries. As a whole, the Institute contributes to addressing a wide range of conditions responsible for both child and maternal mortality.

An ongoing challenge worldwide is the need to balance our focus on the enormous disparities that lead the poorest people to die from diseases that are still a major blight in some areas, such as parts of sub-Saharan Africa and central Asian republics, but are largely gone in other parts of the globe, and our focus on the emerging epidemics of chronic and noncommunicable diseases. We need to tackle these issues without losing sight that there are still far too many neonates dying in their first year of life from undefined and yet imminently preventable conditions such as pneumonia, diarrhoea, HIV, malaria and tuberculosis. We must also make sure that we target research and its practical implementation to deal with the root causes – including poverty, poor education, malnutrition and lifestyle problems – as well as the effects of these diseases.