

#### By Dr Elizabeth Peach – Research Project Manager, HMHB

he difficulties faced by many families here (East New Britain) are really evident. Some families walk 2-3 hours across rugged terrain just to reach the nearest road. It's not surprising then why so many mothers and babies don't get the healthcare that they need during pregnancy, at delivery and after the birth of their baby. Many local families make less than 20 kina per year – the equivalent of about \$10 Australian dollars. They can't afford to send their children to school. buy nutritious food, safe water or pay for housing, let alone seek health care.

It is sometimes easy to get overwhelmed and frustrated by the difficulties of doing a job here. I've never yet had a day that ran smoothly to plan! But despite all of the challenges and frustrations there are enormous rewards to this work. One great privilege is seeing the immense strengths of this community and the wonderful qualities that so many people express. Working amongst local people, importance placed on maintaining personal relationships, friends and family, more often than not trumps individualistic motives.

The potential of the local staff is enormous. When I see them in action sometimes I see the future leaders of the province. They tell me that being involved in HMHB has created an opportunity to work towards something that they are passionate about and that will make a difference to their people and their country. HMHB has inspired them to dream of bigger things for their family

and themselves. One research officer revealed she dreamed of being able to help write an academic journal article working with HMHB researchers could make this dream a reality. They are also actively changing norms. For example, our five research officers are women, most of whom have husbands and children, and are juggling career and family life in a society where women's ability to participate in outside employment is often very difficult.

HMHB is unique in that we have so much support, from the grassroots communities to the leaders of the provincial government. Healthcare facility staff openly express their support and take time out of their busy schedules to meet with us, give us inside local knowledge and advice. From leaders in the provincial government to the person you meet on the street, it is touching that we are so welcome here. It is incredibly humbling that people I meet in the community are so grateful for the work we are doing, and so touched by the generosity of the Australian people who have made it possible for us to work here.

Everyone has a family member who has been affected by a preventable health condition. It's impossible to describe the grief of the families of the women and children who are left behind. What would cause outrage in Australia happens here on a daily basis and it is difficult for everyone to see this happen. HMHB gives people hope for the future of East New Britain and PNG.

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#### **HMHB Partners**

PNG Institute for Medical Research **ENB Provincial Government** 

University of PNG

National Department of Health

Below: Dr Morgan checking on a mum and newborn baby in a rural health centre, ENB.



# Study 1 – HMHB Mothers and Babies Follow-up Study

**Commenced March 2015** 

This study aims to enrol 700 pregnant women from their first antenatal clinic attendance through to delivery, and then follow-up both mother and baby to 12 months after birth. Women are randomly recruited from the five busiest health facilities in East New Britain including Nonga General Hospital, St Mary's Hospital Vunapope, Keravat Rural Hospital, Napapar Health Centre, and Paparatava Health Centre.

## 2 out of 3 newborn deaths in PNG are preventable

# **314 women enrolled** in Study 1

**192** mother and baby pairs seen at delivery

**158** mother and baby pairs seen at **1 month** postpartum

**80** mother and baby pairs seen at 6 months postpartum

**5** hospitals and health centre local partners

**6** field research officers

**5** support staff

2 laboratory scientists

### One year on: HMHB Study 1

As of March 2016, 314 Mums are enrolled in Study 1 and our HMHB research staff have assessed 192 mothers and babies at delivery, and followed up 158 of the mother/baby pairs at one month postpartum. Six-month follow-ups with 80 mother/baby pairs, many conducted in their local village, have been completed. Principal research investigator with HMHB, Dr Chris Morgan said the longitudinal nature of Study 1 is starting to indicate some early trends.

"We are seeing a surprisingly high number of preventable infections, of many types, and of under-nutrition, among these women," he said.

Dr Morgan paid tribute to the commitment of the five HMHB research staff, coordinated by Dr Liz Peach and Ms Pele Melepia, who overcome many daily challenges to achieve these vital follow-up checks with mothers and their babies.

"Following up women in the community to track deliveries and later contact points is very tough – working on weekends, taxing dirt roads and walking tracks to reach remote villages, and dealing with difficult conversations around illness are some of the challenges our staff face," Dr Morgan said.

The female research officers – Noelyne, Priscah, Zoe, Gabriella and Noreen – will be joined by three more field staff in mid-2016. Testing of field samples is being conducted in the purpose-built HMHB Kokopo laboratory by Ms Ruth Fidelis and Mr Duk Duk Kabiu, with Mr Wilson Philip managing the study's database. The Kokopo office has now also become head office for Burnet's operations in PNG.

If activities are maintained and strengthened this year, the research team will have enough vital information on the health of mothers and babies in East New Britain to be able to start to instigate real change. Knowledge of the major causes of illness among local mothers, newborns and infants coupled with knowledge of families' use of essential health care services will enable planning for the most effective solutions to these serious, but entirely preventable, conditions.

A unique aspect of HMHB is that it recognises that health is inextricably tied to development and social change. Beyond the mere collection of data, Burnet has been actively fostering local partnerships with government, health facility heads, clinical and laboratory

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staff over the past year. Burnet takes a consultative, participatory approach to solving problems and decision-making. The Local Implementers Group, involving Burnet staff and clinical staff from all participating healthcare facilities, support each other to improve the health and save the lives of mothers and babies. They see firsthand the tragedy of maternal and newborn deaths and their effects on families. These partnerships have made possible the rollout of training sessions with key staff from all facilities in collection of blood and tissue samples from the placentas of Study 1 Mums. This assists local and Australian-based researchers in their groundbreaking research into the effect of placental malaria on the health of the baby. The provincial government of East New Britain is also an active and long-term valued partner in Burnet's activities in the region.

**Below:** A six-month follow-up of a mum and baby by HMHB team leader Pele Melepia.

