



Working in Hiri West



IMR study nurse Gary Nao checks blood pressure at Hiri West.

By Geraldine Vilakiva

Travelling on bad roads for an hour, twice a day, five days a week, to get to work and back can be really tiring but this is the usual routine for the clinical staff based at the Papa, Porebada and Boera sub-health centres outside Port Moresby.

They are part of a larger team working for the Partnership in Health (PiH) Hiri West project.

The PiH project is one of the biggest research projects undertaken by IMR. It was established to monitor the health and social aspects of communities within the LNG Project, including Hiri West.

There are a number of staff – administration, researchers, reporters and clinical, working on the project.

“For clinical staff, we have five nursing officers, four community health workers, one health extension officer, one doctor, one field administration officer and two clinic clerks, of which seven travel in from the city,” Health Extension Officer, Roselyn Nopa explained.

Like their colleagues in other studies, they are at the front line collecting data and samples to feed all the sub-studies within the PiH project in Hiri West.

Currently they are all based at the Salvation Army-run Papa sub-health centre and working on two studies, Morbidity and Healthy Pregnancy.

These studies are running concurrently, with data for these studies concentrated at Papa sub-health centre due to the closure of the government-run Porebada sub-health centre and Boera aid post.

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Director's Message



The Year of Implementation

This year will be an implementation year for the Institute. The focus for this year is to ensure results from our studies are disseminated to relevant stakeholders including the government and that this data drives new health policies.

We are focusing our agenda so that it is in line with the objectives stated in the Government's 2012 Alotau Accord.

To further strengthen the Institute's focus, AusAID has renewed its funding commitment for another three years for A\$5 million (about K10 million).

AusAID has been supporting the Institute since 2002.

We are very happy and would like to acknowledge and thank the Australian Government and its people for its continuous support to health research in Papua New Guinea.

The funding will be used primarily to support infrastructure

development, systems and processes at the Institute, staff capacity development and most of all research projects.

The Institute is undergoing rapid infrastructure development in recent years with the three big projects being the new Malaria Research Laboratory in Madang, the Partnership in Health (PiH) Level Two Laboratory in Port Moresby and the recent fifth IMR branch in Alotau and acquisition of a property to house the branch.

The new malaria research laboratory in Madang is now at the tendering stage and we hope that the construction phase will begin later in the year.

The lab will be built at a cost of K20 million, and is being funded by the PNG Government, with the PNG Sustainable Development Program complementing the funding.

Thank you.

Professor Peter Siba, PhD

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The Morbidity study involves basic demographic monitoring (such as births, deaths and migration) which clinical staff gather from the patients that they see and treat.

"Once a sick person comes to the health facility, we provide the normal health care – seeing them and treating them for whatever illnesses, but later we enter their data into the log books for the morbidity study," Roselyn explained.

The Healthy Pregnancy study is conducted at the antenatal clinic at Papa and looks into the factors affecting healthy pregnancy.

Roselyn described their daily routine as very hectic and tiring, as they have limited hours to treat sick patients and to get as much data as possible.

Each day, they see more than 50 sick villagers, ranging from infants to old people with various sicknesses.

"We see a lot of non-communicable diseases, respiratory tract infections, TB and malnutrition especially with small children."

"With these cases, we do follow-ups and as well refer them to the Port Moresby General Hospital for further treatment," says Roselyn. If need be, samples such as blood and septum are collected for the sub studies.

At the end of each day, staff enter data of every patient into big log books, fill forms and double-check entries.

At Papa clinic, there are problems accessing sufficient water and the clinic can only operate for three hours each day.

"When we arrive at work, our hours are cut short by an hour of travelling, then with the current water woes that are facing the Papa clinic, we have only three hours to work – collect and compile data before we head back to the office," Roselyn said.

Lack of water increases the risk for cross-infection for the nurses, but this does not stop them doing their work.

While working for the study, these health nurses are also an extra resource for the three village clinics, said Dr Patricia Rarau, Study Clinician for Hiri West.

"The Health Extension Officers are in the field clinics every day and there are further reviews with a doctor," she said.

"However, with the new sub-studies such as TB surveillance and Sentinel Surveillance study coming up, individual staff have also been assigned to take on their new roles as and when the new studies eventuate," said Dr Rarau.

New study for pneumonia and meningitis

Finding germs that cause pneumonia and meningitis in children under five is the focus of an exciting new IMR study that started in Goroka in January 2013.

Head of the Infection and Immunity Unit, Dr William Pomat, said the study was vital to provide and update information about these killer diseases which claim the lives of 4500 PNG children before they turn five each year.

"That number amounts to the sinking of two Rabaul Queen ferries each month," Dr Pomat said.

"We need to act now," he said.

The last study of this type took place 20 years ago and many things have changed since then.

"Due to changing hygiene practices and antibiotic use, germs that were common in those days may have been replaced with different germs or more resistant strains of the same germs," Dr Pomat said.

"If there are more resistant strains circulating, treatment will be prolonged and difficult for patients being treated for pneumonia and meningitis."

This study will investigate the germs that cause pneumonia and meningitis in sick children and also find out if these same germs are circulating in healthy children in the community.

"IMR's new study will provide us with information about the type of bacteria and other germs that cause pneumonia and meningitis, and whether they are circulating in the community, so medical staff can give appropriate treatment to save lives and suggest best practices to reduce and prevent diseases," Dr Pomat said.

The study will also assist policy makers to direct resources appropriately to health facilities, implement preventative action like



IMR researcher Elizabeth Williams enrolls the first child for study, Goroka, January 2013.

vaccination, educate mothers and improve lifestyles to save young lives.

The research is expected to run for two years and about 1000 sick children and 800 healthy children in Goroka will take part.

IMR researchers began awareness activities in January so interested parents could learn more and decide whether to take part in this voluntary study.

The study is a collaborative venture between IMR and the University of Western Australia (UWA) in Perth, with Dr Chris Blyth from UWA's School of Paediatric and Child Health visiting Goroka regularly.

IMR grieves for Pioto Namuigi

Dedicated and long-serving staff member Pioto Namuigi passed away on 10 January 2013 at his home in Goroka.

Pioto joined IMR on 17 May 1991 as a study nurse researching pneumonia, sepsis and meningitis in infants.

Due to his high standard of work, he was recommended for further postgraduate studies and attained a Postgraduate Diploma in Paediatric Nursing in 1996.

Pioto's commitment to excellence led to further study and in 2004, he was awarded a Diploma in Community Health.

He subsequently worked as the paediatric nurse for the Neonatal Pneumococcal Conjugate Vaccine (PCV) study in April 2005.

When the study wound down in 2007, Pioto's skills were in high demand and he moved to the National HIV and Sexually Transmitted Infection Mapping Project.

In 2009, Pioto started his Masters in Public Health. He submitted his thesis and was scheduled to graduate in March 2013.

Director Peter Siba said Pioto was a diligent and dedicated worker who was totally committed to improving the wellbeing of children in Papua New Guinea.

"Pioto was an asset to the Institute. His profession was his life and we should learn more from such a dedicated worker," he said.

Staff attended a thanksgiving service for Pioto's life on 16 January at the Adolf Saweri Auditorium at IMR's Goroka headquarters.



Pioto Namuigi Ese at his desk in Goroka some years ago.

Study calls for condoms in PNG prisons

Condoms are recognised by the PNG Government as necessary for HIV prevention and should be available to prisoners and detainees in police holding cells to guard against HIV, a study by IMR has found.



Emerging HIV Risk in Papua New Guinea: HIV risk, prevention, treatment and care in closed settings makes it clear that unsafe forced and consensual sex between men and between women and men occurs in prisons and police holding cells.

The study was commissioned by the United Nations Office of Drugs and Crime, with funding from UNAIDS.

“The greatest risk for HIV in prisons or holding cells is sexual transmission. All detainees in PNG have a right to health care and HIV prevention through distribution of condoms,” said IMR’s Dr Angela Kelly, Principal Investigator for the study.

Male-to-male sex was reported in all four prisons visited, despite denial from some senior staff and prisoners.

It comprised long-term relationships, sex for goods or as punishment, and

sometimes included one or more men.

While women are safer in prison, in police holding cells they face sexual assault and rape and offers of “snake bail” – sex for bail money.

The risk of HIV transmission is further complicated by penile modification practices common in PNG.

Many men in prisons have undergone procedures such as full or partial foreskin removal and insertion of materials such as ball bearings under the skin of the penis.

“These practices that involve cutting the skin pose a risk for blood-borne virus transmission when cutting or piercing implements are shared,” Dr Kelly said.

Health and HIV counselling services are limited and prisoners are not provided a health assessment on entry into prison.

Only one facility visited for the study provided condoms to prisoners – and this

was only to prisoners going on weekend release.

The study recommends that UN agencies in PNG push for open discussion about sexual violence in prisons and holding cells, and better security including separate holding cells guarded by female wardens for female detainees in holding cells.

Decriminalising male-to-male sex will ensure all people in PNG, including prisoners, have access to HIV prevention.

“The UN will provide further technical assistance in this matter. Closed settings such as prisons and holding cells must become a priority for prevention of HIV and sexual violence,” Dr Kelly said.

The study is available on our website under Research Publications 2013.

Alcohol and marijuana use rife in PNG

Legal alcohol, illegal homebrew and marijuana are the most commonly used drugs in Papua New Guinea.

They contribute to people’s risky behaviour for HIV, but little is done to address this, a report from IMR has found.

The report, *Emerging HIV Risk in Papua New Guinea: Alcohol and injecting and other drug use and HIV risk*, was commissioned by the United Nations Office of Drugs and Crime, with funding from UNAIDS.

The assessment was carried out in four provinces – National Capital District, West Sepik, Western Highlands and Morobe. It sought to identify the risk for HIV associated with alcohol and injecting and other drugs.

“Like other reports, we found that there is a widespread culture of intoxication due to alcohol and marijuana, often consumed simultaneously,” said IMR’s Dr Angela Kelly, Principal Investigator of the study.

“On the other hand, use of illicit drugs that were either injected or swallowed such as heroin or ecstasy was less common but present,” she said.

“Misuse of alcohol and drugs often brings negative social and health impacts, including an increased risk of HIV through unprotected sex, whether consensual or violent.”

Dr Kelly said that despite the long term acknowledgment of the negative impacts, surprisingly little is being done that is known to be effective to address the reasons for addiction, or the addiction itself.

PNG does not have trained drug and alcohol

counsellors and few medical staff specialise in treating people with drug dependency, she said.

“Legislation regarding drug and alcohol misuse does not address current and emerging trends, in particular the developing market for drugs other than cannabis.

“Both government and non-government organisations have strategies to address the abuse and misuse of alcohol and marijuana, but most are not evidence-based and there is a lack of infrastructure, facilities and human resources to successfully address these issues. This hampers their efforts. For example, prohibition is a common strategy but has been shown not to work in PNG or elsewhere,” Dr Kelly said.

The report is available on our website under Research Publications 2013.

On the road with IMR



Head of Transport, Johannes Haaya, in his Goroka office.



Pneumococcal Conjugate Vaccine Project Driver Lori Wawae.



Administration Driver Philip Mogia on the Goroka town run.

By Dinnerose Raiko

Divine Word University Journalism Student

For an organization like PNGIMR, transportation is vital on a daily basis because of the many projects carried out in a wide range of locations.

Generally, we have more than 50 cars distributed among the six branches: Alotau, Maprik, Madang, Milne Bay, Port Moresby and Goroka Headquarters.

The fleet includes ten-seaters and hiluxes, as well as buses for staff transportation.

"The Goroka IMR Transport Department has a total of 21 cars," said head of transport, Johannes Haaya.

Johannes has the overall responsibility for transport of looking after transport for our branches in Port Moresby, Maprik and

Madang. However he says that he is not directly responsible for the drivers as most are employed by a specific project.

The drivers' routines include transporting employees and samples to and from project sites as well as doing the Madang weekly runs, etc.

Administration Driver Philip Mogia said that the drivers also do other things apart from driving when called for. Philip does the Goroka town runs from 11- 12 noon and also at 2pm and says that occasionally he does banking or posts items for administration staff. He also helps Communications Unit staff deliver this newsletter around town each quarter.

Pneumococcal Conjugate Vaccine Project Driver Lori Wawae works for a project that covers a wide area: Daulo district, Goroka Urban and Rural, Ungai – Bena and Lufa.

His runs depend on the daily times of vaccination and requires him to check the daily activities printouts and calculate the schedules.

"If the day is fully booked, I start work early at 6am," said Lori.

If a mother needs to deliver her child, he will find himself working after hours.

"Some of the roads I drive on are very rough." For trips to Daulo, he covers about 30 kilometres every day, while for Goroka Urban and Rural with Ungai – Bena districts, he stays under 20 kilometres daily.

The Daulo area is where Lori faces most difficulties. On rainy days, the road gets slippery and sometimes his car gets stuck in mud.

At those times, he also asked for cash from the road side by people who fix the roads for the cars to pass through.

These people reside around the vicinity of the road.

Outside the towns, our drivers say that weather is a very challenging factor for those who spend their days in an IMR car, on PNG roads.



Divine Wordsmith

Divine Word University student Dinnierose Raiko joined the Communications Unit on work experience for two weeks in December 2012. Dinnie helped us with a range of typical communications tasks, from the mundane, such as mailing lists and newsletter distribution, to the creative, such as researching and writing articles and taking photographs.

Nursing with a difference

By Wendy Levy

Think of a nurse and you picture someone in a white outfit, probably working in a hospital. But nursing skills can take you into many different careers and workplaces and this has been the case for IMR's study nurses.

IMR has around 80 women and men working as study nurses for various research projects around the country.

These Papua New Guineans have used their nursing background to take them into a different area of health – the exciting world of medical research with the nation's top medical research organisation.

Rebecca Sehuko and Christine Waure are just two of IMR's study nurses, both working in Goroka.

Rebecca Sehuko is one of our longest-serving study nurses. She joined IMR in 1991, leaving her job in a hospital to work on a pneumonia study.

Since then, Rebecca has worked on many studies with many research teams.

"It's a different tradition here," Rebecca said.

"Instead of treating patients, we collect specimens and then we follow-up for patients.

Rebecca collects a variety of samples, including faecal stools, blood, nasal and rectal swabs.

Her work has taken her to hospitals, clinics and villages, learning new protocols for different studies.

"For my first study I was a triage nurse for five years, working with the patients on a pneumonia study. I looked at those who had caught a fever, and put them aside for a doctor to check.

Rebecca now works on IMR's new pneumonia study, the first in 20 years to



IMR study nurse Rebecca Sehuko at Lopu Clinic, North Goroka

look at causes of pneumonia and meningitis in under-fives in PNG.

She is definitely the right person for the job as she also worked on the original study in Goroka with IMR's Dr William Pomat.

Working as a study nurse has been an interesting experience for Rebecca.

"There are lots of good things I'm learning here – I've learnt how an infection enters the body.

In the office, there is plenty of paperwork to do to ensure results are matched to the right records.

"I'm still practising as a nurse, so I'm happy," Rebecca said.

Christine Waure works on IMR's rotavirus study, part of an ongoing surveillance program by the World Health Organization (WHO).

"We collect stool samples from children admitted to Eastern Highlands Provincial Hospital with acute gastroenteritis," she said.

The samples are placed in a small esky, which Christine carries down the hill to our laboratory. Here they are checked for rotavirus using a test called ELISA, which

uses antibodies to detect rotavirus in the faeces of children sick with diarrhoea.

Samples that test positive are sent to the WHO Collaborating Centre in Melbourne, where they perform further tests to see which strain of the virus is present.

Christine joined IMR in 2012, after many years working as a hospital nurse.

"I like my job and I enjoy my work," she said.

Although no longer treating patients, she still has contact with those admitted to the ward and provides health education on matters such as personal hygiene.

"I feel like I'm helping them in the preventative part of treatment," she said.

Learning about the research process had been interesting, especially regarding the importance of the samples.

"We see what is being done with them – it's the job of the scientists, but we see the importance of it and the feedback it brings to the patients," she said.

"Here we have ample time to do our research, we have access to the library and computers to further enhance it. It encourages us to pursue our own interest in the subject," she said.

Nursing and research – that's what the job of an IMR study nurse is all about.



With her esky of samples, study nurse Christine Waure walks from the hospital to IMR's laboratories, Goroka.



Social scientist gets top award - a first for IMR



By Geraldine Vilakiva

Sheer perseverance, determination and zeal to succeed were the forces behind an IMR scientist's double success - a Master's in Qualitative Health Research and a prestigious Australian award, the Prime Minister's Pacific-Australia Award (PMPA).

Rebecca Emori, a social scientist with the Partnership in Health project was one happy researcher when she recalled her double success, especially the award which she described as the icing on the cake.

Her sustained academic achievements, contribution to the community and university activities as well as her leadership qualities helped her win the award which was presented to her in December 2012 in Canberra.

Rebecca is the first IMR staff member on the AusAID scholarship program to receive this honour.

"I'm very humbled by this achievement, although it was not an easy road for me," Rebecca said.

She recalled the sleepless nights, difficult assignments and deadlines to be met while completing her Master's program at the University of Sydney.

"It was the strict course guidelines, tough assignments and deadlines but also I was trying to adapt to the Australian way of life in the first year of my program," she said.

"But every time I feel like giving up, I keep telling myself that I'm representing a couple of very important people - my family, the

Institute and my country, PNG, and that kept me going."

The zeal and determination to complete her studies paved the way for her to not only finish her course with flying colours but also to be one of just 13 Australian Scholarship students from Papua New Guinea to receive the award.

The Prime Minister's Pacific-Australia Award supplements the academic programs of holders of postgraduate AusAID Australia Awards for the Pacific Region.

The award program aims to deepen exposure to Australian work practices, build links between recipients and individuals in their host organisation and between host organisations and home employers and strengthen leadership capacity.

It consists of three months work placement with an Australian organization in 2013 and leadership training.

Rebecca attended the week-long leadership training in Melbourne in February.

She will do her three-month work placement with the Centre for International Health at Burnet Institute of Medical Research in Melbourne in April.

Swiss Geigy award for Hetzel

Former IMR researcher Dr Manuel Hetzel was honoured with the 7th Rudolf Geigy Award in December 2012 for his dedicated work as an epidemiologist in the research and control of malaria.

Professor Rudolf Geigy was the founder of the Swiss Tropical Institute in Basel, which is Dr Hetzel's home institute and where he has recently returned to work.

The Rudolf Geigy Award is given to young researchers who innovatively combine laboratory and field research and who conduct their research in partnership with the global south.

Manuel worked intensively to lessen the global burden of malaria.

He spent the past four years at IMR, evaluating PNG's National Malaria Control Programme and supervising the work of over 60 collaborators.

At the award ceremony in Basel, Switzerland, Manuel explained he was given the award while still part of both IMR and the University of Queensland, Australia.

"This is a great honour and it would not have been possible without the support of my Malaria Control team, the Director and all other friends and colleagues at PNGIMR," he said.



Dr Hetzel receiving his award in Basel, Switzerland.

Training Nius

Internal Competitive Research Award Scheme 2013

In 2011, a grant of K1m from the PNG Government enabled IMR to establish an internal competitive research award scheme (ICRAS). The funding was increased to K1.5m in 2012 and this year, K2m has been provided.

The scheme has two streams: small grants for early and mid-career researchers (K600,000) and larger research grants for mid-career and senior researchers (K1.4m). For the small grants, research proposals for around K20,000–60,000 are the most competitive and it is anticipated that around eight to 12 awards will be made. For the large grants, proposals under K300,000 are most competitive and around three to five awards will be made.

Applications closed on 22 February, with the ICRAS Secretariat receiving many expressions of interest. The ICRAS Scientific Review Committee convened in March.

Post Graduate Studies

Masters Students

Rebecca Emori

AusAID Development Scholarship Recipient of 2011, Rebecca Emori, completed her Masters studies in Qualitative Health

Research from the University of Sydney in 2012. Rebecca was honoured with the Prime Minister's Pacific Australia Award, given to the top 30 Pacific Island and East Timor AusAID students in Australia. As part of the award she will do a work placement in Australia in 2013.

Lincoln Timinao

Lincoln Timinao of the Malaria Control Project has successfully completed his Masters in Science Program at the University of Basel. His program was supported by the Swiss Tropical and Public Health Institute. He defended his thesis in February 2013, scoring very good marks and will graduate and return to PNG.

2012 Honours Students

Honours students Diana Timbi, Marinjho Jonduo, Tamara Koleala, Rebecca Vinit and Elvin Lufele under the Partnership in Health Training Program are now finalising their theses for submission to the University of Papua New Guinea. Following successful thesis defence in March, they will graduate in April.

2013 Honours Students

Tilda Orami (Immunology), Nola N'Drewei (HIV/STI), Lee Marava (PiH), Benishar Kombut and Joe Jude from UPNG School

of Natural and Physical Sciences (Biology/ Chemistry Major) have registered and are settling into their projects.

Workshops

Project Management Refresher (20-21 February)

Due to demand, this course was run again by Monika Vnuk (CASS). Six staff in project management roles attended and the refresher focused on project planning, budgeting, accounting, implementing, monitoring, auditing and reporting.

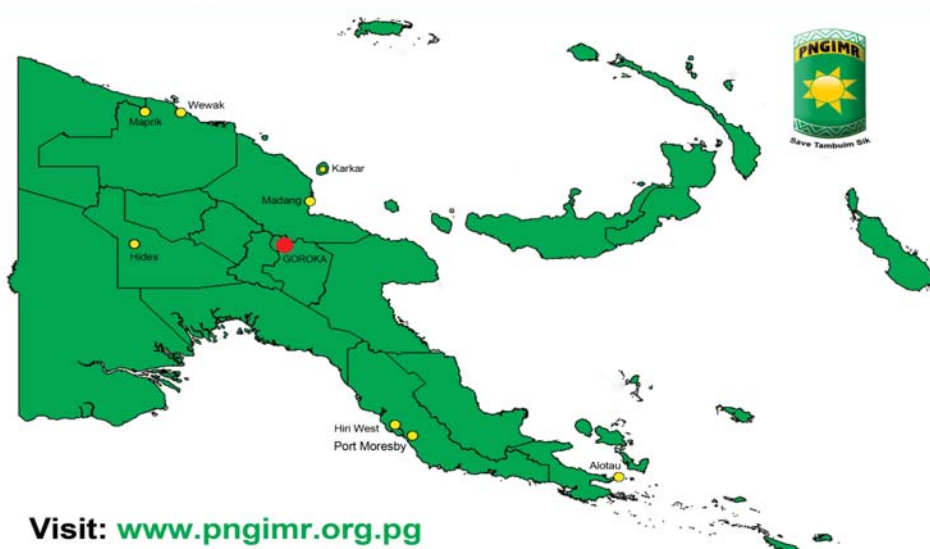
Future workshops

Workplace First Aid Training (Madang, March/April)

Following successful first aid training in Goroka late last year, the training office is now liaising with PNG Red Cross to arrange a similar course for Madang project drivers and field based scientific officers. The training cover first aid practice, bandages/ slings and carriages, basic life support (resuscitation), burns management, wounds and bleeding, fractures and tissues injuries and handling of poisons.

Training Nius is compiled by Dickson Kuvi (Training Officer) and John Yogiyo (Assistant Training Officer). Phone: +675-531 4259.

OUR LOCATIONS



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