

# What's Happening

at the Sonja Kill Memorial Hospital – July 2015



## ANTIBIOTIC RESISTANCE – A GLOBAL PUBLIC HEALTH CHALLENGE

After the discovery of Penicillin by the Scottish scientist Alexander Fleming in 1928, and the first success stories in treating infected wounds in World War II, antibiotics were seen as miracle drugs. Most of us have never experienced what it means when common bacterial infections such as a sore throat or an infected tooth could lead to death. Antibiotics have significantly decreased mortality of bacterial infections.

However, extensive and inappropriate use of antibiotics in humans and animals in the last few decades has resulted in widespread resistance against commonly used antibiotics. (Fig. 1) It is a growing global public health threat with serious consequences for health care systems. The economic impact is huge as reserve antibiotics to treat these “super bugs” are expensive. As an example, in neighboring Thailand, around two billion dollars a year is spent to treat infections due to multi-drug-resistant bacteria.



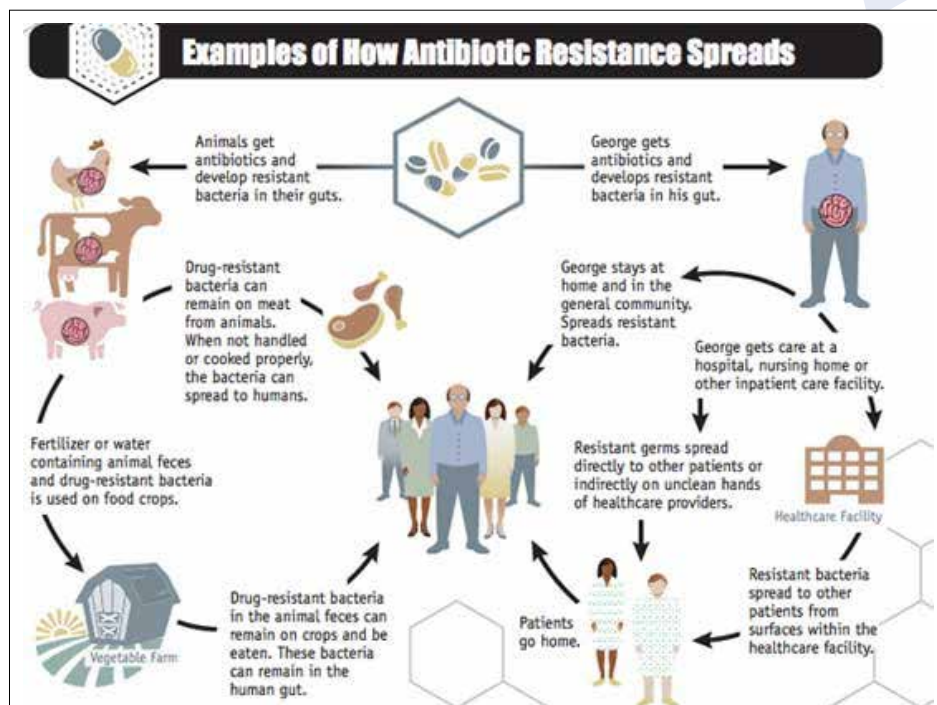
Soeng Kimsiek

### I didn't know where to go

Soeng Kimsiek is a 17-year old hardworking teenager. He left school early and went to work as a laborer in Thailand to help support his family. The village he grew up in is poor. His mother is a factory worker and his father is also a laborer.

Kimseak started to feel strong abdominal pain. Therefore he travelled back to his hometown, where his mother took him to a local clinic. They were not able to help, and his pain grew stronger. Kimsiek's mother was listening to the radio when she heard about a hospital in Kampot that helps poor people.

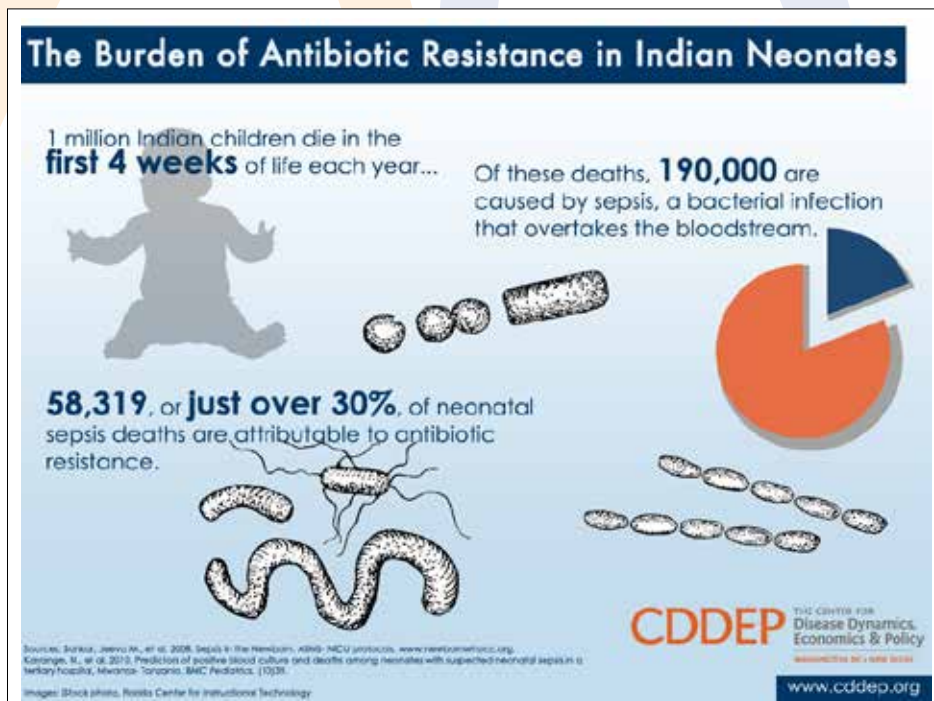
Mother and son travelled to the Sonja Kill Memorial Hospital where Kimseak was diagnosed with appendicitis. Appendicitis is caused by a blockage in the appendix that allows bacteria to grow and cause an infection. Left untreated, the appendix can perforate and the complications from such an infection can be fatal. Luckily, Kimsiek's infection had not yet reached this stage. He received an operation just in time. Thanks to the correct timing of the surgery, and despite the culture from his appendix demonstrating a form of resistant E. Coli infection, he did not have any complication or require prolonged antibiotic therapy.



(Fig. 1) Simply using antibiotics creates resistance. These drugs should only be used to treat infections.

Studies have shown that Cambodia is not safe from this epidemic spread of multi-resistant bacteria. Antibiotics are easily available as over-the-counter medicine, and many patients buy them in pharmacies as first remedy of any illness with fever. During the first National Workshop on the Containment of Antibiotic Resistance in Phnom Penh in 2011, it was highlighted that Cambodia is second in the world after India for drug resistance. Speakers from three pediatric hospitals in Phnom Penh and Siem Reap showed high rates of resistance in bacteria in children that can cause pneumonia, urinary tract infections and gastrointestinal infections.

Even worse is the situation in adults. A study on bloodstream infections at the Sihanouk Hospital Center of HOPE in Phnom Penh (Thesis Dr. Erika Vlieghe, Institute of Tropical Medicine, Antwerp) demonstrated that there is a huge burden of multi-resistant coliform bacteria in Cambodia, increasingly in infections acquired in the community. With regard to infections of the blood stream, 47% are caused by multi-drug-resistant E. Coli, and can only be treated by extremely expensive reserve antibiotics. Such treatment can easily cost up to \$ 200/day. Resistance rates for Salmonella bacteria, including those responsible for typhoid fever, are even more alarming. Consequently, mortality from typhoid fever in children can be as high as 10 %.



(Fig. 2)

Less than six months after opening the surgical department, the medical team of the Sonja Kill Memorial Hospital has been challenged with surgical infections due to multi-drug-resistant bacteria. In less than six weeks we treated three adolescents with complicated appendicitis. All three cultures taken during the surgical procedures showed E.Coli resistant to one or more of commonly prescribed antibiotics. One of our patient stories highlights this problem.

While the Ministry of Health together with the WHO and other organizations has developed a national policy to combat Antimicrobial Resistance in Cambodia, growing resistance must be tackled through awareness-raising and changing people's behavior.

The Sonja Kill Memorial strives to treat patients according to evidence-based guidelines. A lot of the teaching of our doctors focuses on the appropriate use of antibiotics. At the same time, we make our staff aware of infection control and are in the process of developing strong policies and procedures to prevent infections spreading inside the hospital. In developing these policies and procedures, we will place a

Kimsiek has nearly recovered, and is glad to be alive. He remarked, "I didn't know how my life would go on. I was in so much pain and didn't know where to go."

Kimsiek's mother has been very pleased with the hospital and treatment. Her son's challenging financial situation was assessed, and as a result he did not have to pay for his treatment. Kimsiek has decided that when he gets better, he will look for a job closer to home. He will soon be able to return to work, and to continue supporting his family.

## Mol Meas happy ending

"During her time at the Sonja Kill Memorial Hospital, Dr. Anne Tollan helped Mol Meas and her husband (featured in the December 2014 newsletter) to have a happy ending. Mol Meas, suffering from Diabetes mellitus had stable blood sugars under treatment with insulin prescribed by our doctors. During delivery, Mol Meas tired out, and her big but healthy and beautiful girl had to be borne by C-section.



The happy family after the consultation.

She and her husband are very happy about the outcome and appreciate that the surgical procedure and the care have been provided at a discounted rate. The picture shows the beautiful family during a follow up visit for vaccination of their baby girl."

strong focus on infection control measures in the neonatal and pediatric Intensive Care Unit that will open in fall 2015. We are aware of the fact that multi-resistant bacteria are causing high neonatal mortality rates in India. As we know, Cambodia is the country with the second highest prevalence of antibiotic resistance (Fig. 2). We want to prevent outbreaks in our neonatal unit.

*“Some experts say we are moving back to the pre-antibiotic era. No. This will be a post-antibiotic era. In terms of new replacement antibiotics, the pipeline is virtually dry. A post-antibiotic era means, in effect, an end to modern medicine as we know it. Things as common as strep throat or a child's scratched knee could once again kill.”*

Margaret Chan

## A story of hardship

Sinat comes from a poor family of nine siblings. After getting married, she moved to Sihanoukville with her husband to work in a factory. Working in a factory is hard difficult, and Sinat started feeling weak and sick after she became pregnant. This was not Sinat's first pregnancy – tragically she had already suffered a miscarriage, and lost another baby ten days after delivery due to a heart malformation.



Sinat recovering after surgery

In Sihanoukville, Sinat began to have heavy bleeding and went to the local hospital. She was informed that she had a molar pregnancy. This means that all the symptoms of pregnancy exist, however a baby does not form. Sinat was devastated, scared and in pain. The staff of the hospital wanted to send her to Phnom Penh, but Sinat was convinced she would not make the five-hour journey alive.

Her mother was fearful for her daughter's life. She knew about the Sonja Kill Memorial Hospital because she had been treated there, so she decided to travel with her daughter to Kampot, a journey of more than two hours. It was already night when

## THANK YOU DR. ANNE TOLLAN



We would like to say **thank you** to Dr. Anne Tollan who volunteered with us for the last few months. Her strong skills and expertise in the field of obstetrics and gynecology were greatly valued at our women's clinic and maternity ward. Dr. Anne, who is originally from Norway but now lives in Australia, was inspired to work in women's health after being a passionate supporter of the feminist movement in the 60's and 70's.

Dr. Anne realized that women's rights, including reproductive health and education rights, required determination and resolve in order to make progress. She enrolled in medical school with a vision and interest to work with a focus on women's health, which at that time was a male dominated field.

While discussing her experiences here at the Sonja Kill Memorial Hospital, Dr. Anne has been impressed with the facilities, and believes that it is developing to be comparable to any institution in the Western world. During her time here she has provided pre and post-natal care, facilitated births, and provided general treatment for women's health issues.

One of the biggest challenges for women's health in Cambodia is a lack of education. Women's issues are not widely talked about, and most women only gain a little information from their mothers or grandmothers. Additionally, sexually transmitted infections (STIs) are a massive issue that is often under-treated and

prevalent, often being attributed to promiscuous husbands unaware of STI's. Dr. Anne was impressed and pleased with her experience volunteering at SKMH. She remarked that the cleanliness and beauty of the hospital gave it a feeling of quality. She appreciated the kindness and welcoming nature of the staff. Dr. Anne remarked that there was a need for additional equipment and supplies, and would like to appeal to donors to source and send, if possible:

- old-fashioned electric vacuum pump with additional metal cups in different sizes
- Hulka forceps
- (1 or 2) uterine elevating forceps and IUD devices, especially copper.

## MEDICAL EDUCATION



Dr. Sar Thona receiving his diploma



Dr. Neousoeun Sucheata receiving her diploma

No one can stop our learning! Dr. Neousoeun Sucheata (Image 2) and Dr. Sar Thona (Image 1), our two chief residents in pediatrics, showed great initiative. After finishing medical school, they decided to pursue further study online from the highly regarded University of Sydney. They successfully completed a Diploma in Child Health, known as the International Postgraduate Pediatric Certificate (IPPC).

The vision of this particular area of study is to provide doctors, nurses and allied health professionals who work with children and adolescents affordable access to education. This education promotes best practices and offers top quality learning opportunities to health staff in developing countries.

Adjunct Associate Professor Kathryn Currow, Discipline of Pediatrics and Child Health, University of Sydney (Australia) visited SKMH on 28 May 2015 and presented the Diploma of Child Health to Dr. Neousoeun Sucheata and Dr. Sar Thona. Dr. Cornelia Haener, CEO of Sonja Kill Memorial Hospital, also participated in the ceremony. Dr. Cathryn and Dr. Cornelia were able to discuss medical education and Public Health issues, such as how to improve medical education and quality health care in the south of Cambodia. We are so pleased to have established a relationship with the University of Sydney, and are very proud of our two young doctors. We hope more of our young doctors can be enrolled in this training program.

*"Education is not the filling of a pail but the lighting of a fire"*

*William Butler Yeats*

they arrived. Sinat was in shock from heavy bleeding and needed immediate surgery. The next day she was in pain, but also felt very relieved. She said, "I feel like I died and have been reborn". She was so thankful to the doctors, nurses and midwives who demonstrated such compassion towards her.

Once fully recovered, Sinat hopes to move away from factory work and start her own business. She wants to return to the Sonja Kill Memorial Hospital if she becomes pregnant again. We look forward to helping her from the beginning to the successful conclusion of her next pregnancy!

## New Pediatrician joins the team!



We are very pleased to announce the arrival of Dr. Ken Avenmarg and his lovely family. He will be joining the Sonja Kill Memorial Hospital team for three years, and we're very much looking forward to working together. Dr. Avenmarg has lived in Japan, Singapore and Germany, where he studied to become a pediatrician. Before coming here, Dr. Avenmarg was working in a clinic for pediatric cardiology. We are excited for the work he will do with our Cambodian team in developing guidelines, training modules, and setting up the pediatric and neonatal intensive care units. Our goal has always been sustain-



Happy Seng Sokna with her first baby.

## TINY...BUT BORN IN A SAFE ENVIRONMENT

Seng Sokna is a 23-year old young woman from Kampot. She lives in town and works at her parent's small shop. Overall she had a uneventful pregnancy, and was looking forward to giving birth to her first child. She had antenatal check-ups at our women's clinic and carried her baby to term. Sokna's delivery went well, however her baby came out at a tiny weight of 2.1 kilograms.

Premature and underweight births are largely responsible for under-five mortality, especially in the developing world. There are a range of issues associated with underweight birth, including hypothermia. Thus, the WHO considers preserving the infant's body temperature and warmth as an essential part of neonatal care.

About 20 million low birth weight babies are born each year, and out of those, 96.5 % of them occur in developing countries. Low birth weight plays a role in 60 % – 80 % of all neonatal deaths. These figures could be drastically decreased by simple and cost effective care. Aside from death, babies who present with preterm and underweight birth can be associated with a lifetime of disability for some children. In high resource countries, most babies survive pre-term or underweight birth, but in low resource countries, survival rate is much lower.

Sokna was lucky that our team of highly trained midwives and

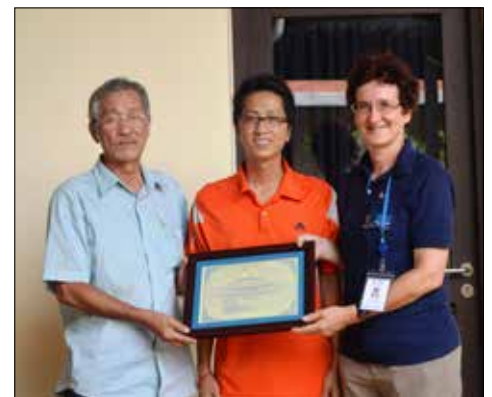


Only 2100 grams but ready to explore the world.

ability, and Dr. Avenmarg's three year commitment will be significantly beneficial for providing expert training and knowledge to our Cambodian staff.

## Aftermath of a past surgery

Yin Ban, a 28-year-old man from Kampot, suffered from abdominal pain for many years after a surgery performed for abdominal trauma. While he was travelling with his family to celebrate the Khmer New Year holidays, his pain increased. His family brought him to the Sonja Kill Memorial Hospital for emergency treatment.



Yin Ban and his father giving a generous donation to the hospital.

An ultrasound investigation showed strange solid masses in two different areas of his abdomen. Two volunteering surgeons, Dr. Arnold Gaitzsch and Dr. Rafal Borucki, discovered the cause and the truth when they opened his abdomen in the operating theatre. They were surprised to find that the solid masses were the result of foreign objects – surgical gauze sponges – that were left behind following the previous surgery! The sponges were well-encapsulated masses, but had become infected.

Ban and his family were so happy that the reason for his long-standing problem had

doctors was able to deliver her baby girl safely, and give her the necessary care to survive as an underweight neonate. The staff paid special attention to her postnatal care by regularly monitoring, taking temperature, recording breastfeeding and providing regular visits from the pediatrician. Sokna said she was worried that her baby might have died at another hospital, and is very happy that her tiny baby is doing so well. She can't wait to go home and be a stay at home mother!

<http://www.who.int/mediacentre/factsheets/fs363/en/>  
<http://vector.childrenshospital.org/2013/05/hot-enough-for-you-keeping-babies-warm-in-developing-countries/>

## SAMDACH AKEAK MOHA THOMAK POTHISAL, CHEA SIM



The staff of the Sonja Kill Memorial Hospital would like to express our deepest condolences to the family of Samdach Akeak Moha Thomak Pothisal, Chea Sim. We are very grateful for Samdach Akeak Moha Thomak Pothisal, Chea Sim and his family's support for the development of the Sonja Kill Memorial Hospital.

Samdech Chea Sim's contribution to the planning and development of the Sonja Kill Memorial Hospital in its early stage was instrumental. When Dr. Winfried Kill was gathering the technical team to start the project beginning of 2006, he did not want to start the construction without having met with Prime Minister Samdech Hun Sen.

Samdech Chea Sim was instrumental in arranging a meeting with Prime Minister Samdech Hun Sen after he had seen the construction plans during a meeting with Dr. Winfried Kill and his project team. After the meeting with Prime Minister Samdech Hun Sen on the following day, the construction of the Sonja Kill Memorial Hospital was started without delay.

been discovered. Out of deep gratitude his family donated a generous amount of money to the hospital, and confirmed that they will do so again in the future. They were all so impressed with the service provided at the hospital.

The case of Yin Ban has helped our local surgical team to understand why we encourage them to count sponges and instruments before and after every surgery. They enthusiastically implement counting sheets and checklists adapted from the WHO.

We are very grateful for Yin Ban and his family's generosity, and share their happiness that he has fully recovered.

## Volunteers

We are grateful for following volunteers who have helped us in the last three months:

### December 2014

Dr. Tina Martin	General Practice MD
Monique Hayes	Medical Student
Dr. Parul Sud	Internal Medicine

### January – March 2015

Dr. Charlene Clark	Internal Medicine
Dr. Margo Hudson	Diabetes/Endocrine Medicine
Philipp Jensen	High school graduate
Natasha Stoinis	Medical student
Emma Warner	Medical student
Manisha Abeysinghe	OB/GYN
Dr. Nigel Symons	Anesthesiologist
Dr. Arnold Gaitzsch	General/Vascular Surgeon
Dr. Clemens Fehr	Family Practitioner
Dr. Maria Olivari	Cardiologist
Thomas Edward Kovarik	International IT consultant I.T
Laura Keast	Medical Student
Sarah Kibble	Medical Student
Rhian Thomas	Medical Student
Marlene Trattner	Nursing Student
Jasmin Maresch	Physiotherapy Student
Katharina Fallenbacher	Nursing student
Raymond O'Keefe	Nurse Anesthetist
Annegot Schroder	Midwife
Dr. James Schmitt	Internal Medicine
Dr. Maki Soto	Resident Doctor Family Medicine
Dr. Rafal Borucki	Surgeon
Dr. David Fudman	Internist
Dr. Theodore Yurkosky	OB/GYN

### April to June

Dr. Victoria Mohr	OB/GYN
Jessica Ramsay	Laboratory Scientist
Ed Parton	Website design/IT
Dr. Anne Tollan	OB/GYN
Andrea Niederhauser	Public Health
Susan Taplin & Team	Nurse Practitioners, Social work & Physiotherapy Students
Dr. Saima Rashid	Internist
Dr. Brian Rice	Emergency Medicine
Dr. Kudzai Dombo	OB/GYN
Dr. William Holmes	Surgical
Dr. Kendrick Kahler	Family Practice

## Statistics

**28,110**

Patients treated April 2012 – June 2015

**4,417**

New patients treated  
January 2015 – June 2015

**74,713**

Consultations April 2012 – June 2015

**13,317**

Consultations  
January 2015 – June 2015

*"A good head and a  
GOOD HEART are always  
a formidable combination"*

*Nelson Mandela*

## Information

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