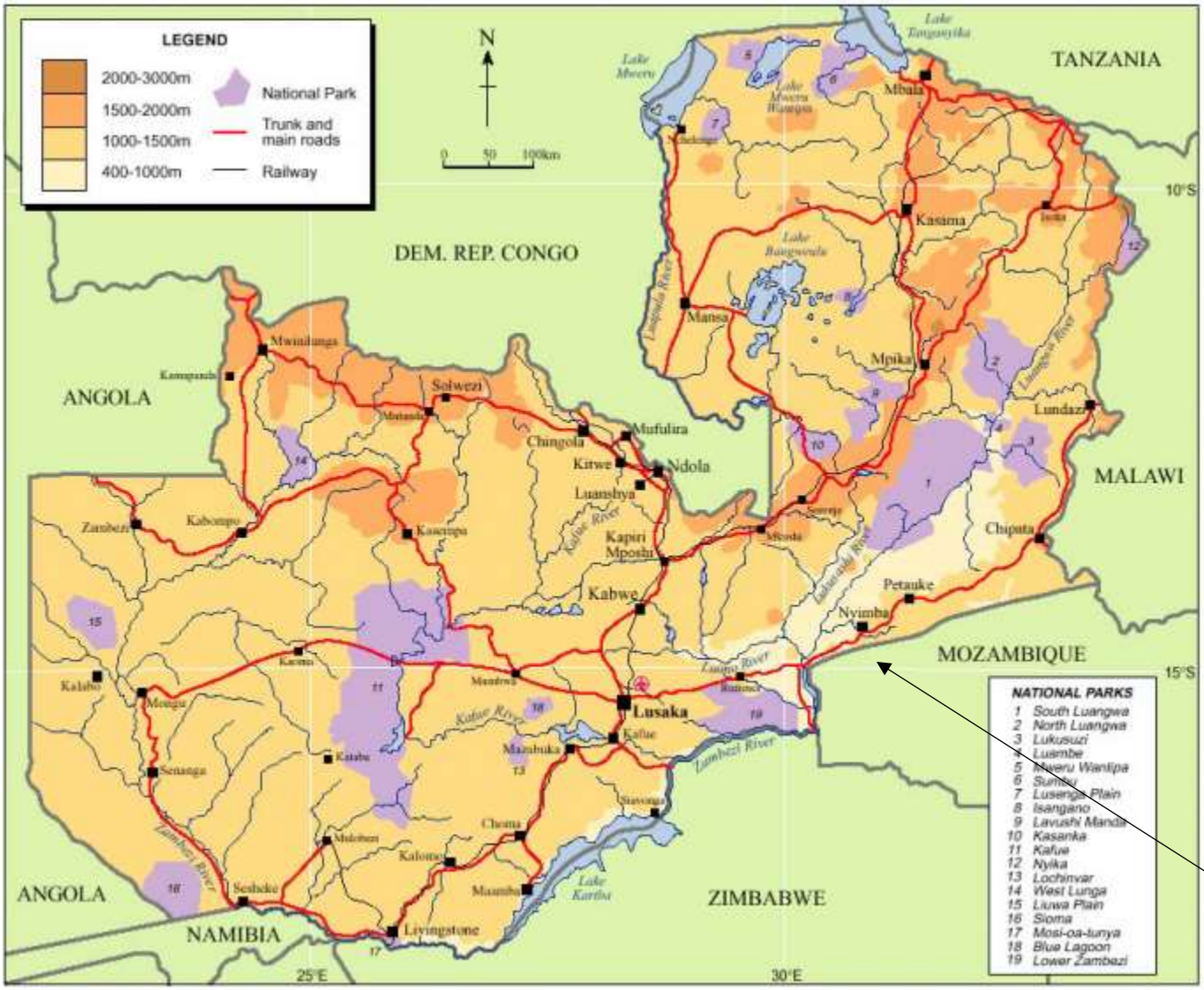
Pre-eclampsia

The Virtual Doctors work

I am delighted to report that this last month has seen an increasing number of cases referred from Zambia. Our volunteer doctors have been working hard to answer them swiftly and accurately. The variation in cases never ceases to amaze me: from accidents like scalds to complex medical cases involving HIV or high blood pressure to mental health problems.

This month our case is from the Kasinsa Rural health clinic. Kasinsa is a rural town found in Luangwa district in Lusaka province. We have visited other clinics in Lusaka province before.



Luangwa district

Kasinsa lies directly north of the district capital Luangwa on a tarred road. To the East lies the Luangwa River which flows south to join the Zambezi. Luangwa district sits on the border with Zimbabwe and Mozambique. It covers an area of approximately 3872 km squared and is mostly forested with multiple hills. It has a population of around 24000 people most of whom are under 40 years of age according to the 2010 census. Unlike the UK which is experiencing real winter weather with snow and temperatures

of -8 °C, Kasinsa is currently experiencing temperatures in the low 30’s with cloud and a risk of thunder and rain.

Luangwa River
Elephants crossing the Luangwa river

Virtual Doctors currently support 6 rural clinics in Luangwa district and the team in the District Hospital


Kasinsa

November has been a very busy month both for Kasinsa clinic and the virtual doctors. This month's case is a 34 year old pregnant lady who came to the clinic for review. She was attending clinic due to high blood pressure in pregnancy and was not responding to treatment. Treatment of methyldopa had been started some two weeks before by the attending clinical officer. This lady has had 7 previous pregnancies. She has 4 healthy children but sadly lost 2 babies during the later stages of pregnancy due to problems with her blood pressure. Her blood pressure on the day of clinic was extremely raised (233/165). The baby's heart rate (foetal heart rate) was said to be good and strong and the lady was feeling the baby moving. She did not have any other symptoms for example swollen ankles or any seizures (fits).

The clinical officer asked specifically for help from one of our obstetrics and gynaecology specialists. The Virtual Doctor wanted some more information as he wanted to be sure this lady did not have more symptoms of a condition called pre-eclampsia. Was there any epigastric pain (pain just under the ribs in the centre), headache, blurring of vision? Her urine needing testing for the presence of protein- this is done using a dip stick. He then outlined a management plan to start on further medication (Nifedipine) to try to reduce the blood pressure, this is needed to be lowered slowly so the baby comes to no harm. The lady was to stay in the clinic and have regular BP measurements whilst the medication was started and for the baby's heart rate and movements to be monitored. This is really all that is available in the rural clinic setting for monitoring the baby. If the BP remained too high or there were more symptoms

the volunteer doctor recommended referring the lady to hospital where she could be monitored more closely.

The lady's blood pressure did not come down and although she had no other symptoms the clinical officer wisely referred her to hospital to protect both mother and baby.

This led the clinical officer to ask for some contraceptive advice for the lady after this pregnancy. She was at high risk of developing high blood pressure in pregnancy again and it would be wise to offer her some sort of contraception. When you have had high blood pressure, even when it is just in pregnancy, many contraceptives are contraindicated (this means they are not safe to use). A GP virtual doctor was able to give the advice that a progesterone only method be it by mouth or injection could be safely given in this case.

What is Pre-eclampsia?

Pre-eclampsia is a condition that affects some pregnant women usually during the second half of pregnancy (after 20 weeks) or soon after the baby is delivered. Women with this condition develop high blood pressure, protein in the urine and other signs and symptoms such as headache, blurred vision and upper abdominal pain. The more severe it is the more risk there is to both mother and unborn child. For the mother it may lead to complications of bleeding, fitting, and stroke. For the unborn baby the blood supply from the placenta, from which it receives oxygen and food, can be greatly reduced leading to poor growth and development, premature delivery or stillbirth.

Who gets Pre-eclampsia?

Mild pre-eclampsia is thought to affect about 6% of pregnancies with 1-2% developing it severely. The risk of developing pre-eclampsia is increased if:

- You have a pre-existing condition such as diabetes, high blood pressure or kidney disease before pregnancy
- Other conditions such as Lupus or antiphospholipid syndrome
- If you have developed the condition in a previous pregnancy

There are a few other risk factors that slightly increase the chance of developing the condition: a family history of the condition, being over 40 years of age, multiple pregnancy (twins or triplets) or having a BMI (body mass index) of 35 or more.

In the UK, if you're thought to be at high risk of developing pre-eclampsia, you may be advised to take a daily low-dose aspirin from the 12th week until the baby is delivered.

What Causes pre-eclampsia?

The exact cause is not known but it is thought that a problem occurs in the placenta.

Treatment

Assessment is key to work out how severe the condition is. In the UK this usually involves being assessed in a special unit in hospital. Both the mother and unborn baby are monitored. In the UK it is as follows:

- Regular blood pressure to note any abnormal increases
- Urine samples to measure protein levels
- Blood tests for example: to check liver and kidney function and to check platelets
- Ultrasound scans to check blood flow through the placenta, measure the baby's growth and observe baby's breathing and movements
- The baby's heart rate may be monitored electronically to produce a cardiotocograph (CTG) which can help detect stress or distress in the baby

The only cure is by delivery of the baby so regular monitoring until the baby is delivered is usually carried out. Delivery is usually around 37-38 weeks but sometimes earlier in severe cases. This may be by artificially started labour (induction) or by caesarean section.

Medication for lowering blood pressure prior to delivery may be given. These medications reduce the likelihood of serious complications, such as stroke in the mother. Some of the medications used regularly in the UK include labetalol, nifedipine or methyldopa.

Complications

Although most cases of pre-eclampsia cause no problems and improve soon after the baby is delivered, there's a risk of serious complications that can affect both the mother and her baby.

There's a risk that the mother will develop fits called "eclampsia". These fits can be life-threatening for the mother and baby, but they are rare.

Seasons Greetings

I would like to take this opportunity to thank you all for reading the blog.

Wishing you all a very Happy Christmas and a Happy and Healthy 2018.