Medical Elective Report - Elizabeth Day

**Date and Location:** Northern Provincial Hospital (NPH), Espiratu Santo, Vanuatu

**Contact:** Dr Thomas Sala, Head of Obstetrics and Gynaecology.

This elective was supported by:
- Wellbeing of Women
- Royal College of Obstetricians and Gynaecologists
- Royal Society of Medicine
- Addenbrookes Abroad
- Fitzwilliam College, Cambridge

**Elective Aims**
1. Experience hospital work in a low resource setting.
2. Increase obstetric and gynaecology experience with a view to specialise in this area in the future.
3. Set up and execute a research project investigating the perception of cervical cancer prevention and screening.

**Clinical Experience**

**Obstetrics**
Obstetrics makes up most of the O&G workload at NPH and expectant mothers have access to regular antenatal clinics at a charge of 300vtu per visit (approximately £2.00) and many chose to give birth in hospital. During the elective I was able spend time in both the maternity ward and the antenatal clinics, as well as assisting in theatre.

**Antenatal Clinic:**
The antenatal clinic takes place in a designated corner of the hospital and the waiting room is heaving by 8am most days. On arrival women are given a piece of cardboard with a number on and are seen in that order – with many waiting all morning to see the midwife. Saying that the system is actually very efficient, with mothers being weighed and measured before seeing the midwife and carrying their own obstetric notes. Education videos are played on a large CRT TV in the waiting room, which promote breast-feeding and HIV screening.

*The waiting room in the antenatal clinic*
The obstetric notes consist of an A4 cardboard leaflet, much the same as in the UK and laboratory results are stapled to the file. In all of cases these include the results of STI screening, with a scrawled “treated” if antibiotics have been given. The chlamydia rate in Vanuatu is high, with studies estimating it to be between 20-25% [1,2]. Every expectant mother is treated and given treatment for her partner. Other STIs are common and Hepatitis and HIV testing is offered to all women at their first visit.

The clinical assessment is brief and I was able to quickly pick up the routine in the clinic and carry out assessments independently. This was an excellent experience and it fine-tuned my palpation skills so I was confident the fetus was in the correct position for gestational age. It also challenged my clinical decision-making, as I was able to admit patients and arrange further follow up. Many of the women returned at four week intervals, a higher frequency than here in the UK, which meant I was able to see a few women through their final antenatal visits and deliveries. The main challenge in the antenatal clinic at NPH is the accuracy of due dates/gestational age. Dating scans are not routine and women’s recollection and communication of their last menstrual period is often hazy. This means that many women present over-due according to their obstetrics notes but clinically are at term; this emphasised to me the importance of good clinical assessment.

One of the antenatal clinic rooms – with sonicade and dating wheel.
Maternity wards:
The maternity ward is split into antenatal and post-natal with the post-op patients in a side room. Women are admitted via clinic or arrive in labour. Women often arrive in active labour and are moved directly to the delivery room. My first visit here was quite shocking – the room looks a little like a mortuary, with three black beds along the back wall each with thick green waterproof sheets covering them. These heavy-duty sheets are well worn and metal bowels lie on the tiled floor along with a couple of cots awaiting the new arrivals.

The deliveries themselves are smooth and carefully monitored, a partogram is closely adhered to and the consultant is kept informed in difficult cases. I think appearances can be deceiving and the medical care, given the facilities, is of a very high standard. However time and again I felt uncomfortable as women were told to "be quiet" during labour. Men are not allowed into the delivery room and only very rarely is the patient’s mother present. This leaves the woman alone as the midwives focus on the delivery. During one delivery a midwife told the woman to stop crying because “the white doctor is here”, which made me feel incredibly uncomfortable and question whether my presence was actually harmful. At the other end of the spectrum, I felt I was able to improve the quality of care of women in theatre as I could to spend time with them before and after c-sections to explain and reassure them.

The status of women in Vanuatu is very low and the attending surgeons and anaesthetists pay little attention to them. The consent procedure for c-section highlights this as consent must come from the husband and not the woman having the procedure, the same is true for sterilisation. This is firmly adhered to and there are often two consultations, one with the woman to identify the need for surgery and a second with the husband to gain consent.

I was able to assist in a number of c-section and one of the highlights of my time at NPH was delivering the second twin during a c-section. My experience in theatre, both with obstetrics and gynaecological procedure, has strengthened my desire to specialise in this area in the future.

Myself and Dr Sala prior to a C-section
Gynaecology

Gynaecology is only a small fraction of the work load at NPH but I was able to assist in theatre with sterilisation procedures and a hysterectomy. The indications for the hysterectomy were intriguing as it appeared from the brief medical notes the women had requested the procedure because two of her sisters had died from gynaecological malignancy. I initially found this surprising but without CT/MRI imaging and a histology service it was probably a fairly pragmatic approach to the situation.

I also saw for the first time a ruptured ectopic pregnancy, which presented as an acute abdomen in the emergency department. This case highlighted the skill of the medical team and the limitations of working in a developing county. The woman presented with severe abdominal pain but the hospital had run out of the reagents for pregnancy testing, making it difficult to distinguish between appendicitis and an ectopic pregnancy. The ultrasound was inconclusive so they proceeded to a laparotomy. I asked Dr Sala what he would do if he confirmed appendicitis, to which he replied he would carry out an appendectomy - I was reminded of the skill of a true general surgeon and how specialised we are in the UK.

Cervical Cancer Prevention:

A cervical screening programme is running in Vanuatu and the two midwives involved at NPH are very well informed. They often take the opportunity to educate women waiting for the antenatal clinic on the screening programme and encourage their attendance to the clinic. Unfortunately the samples are sent to another island to be analysed by the only cytologist in the country. This means delays of up to 3 months before the results return. For the midwives, this is the main barrier to a successful programme as after this length of time it is very difficult to contact women with their results. It was frustrating to see such enthusiasm amongst the midwives explaining the screening programme and indeed from the women attending, but a break down in its effectiveness because of a lack of skilled personal.

There are very few treatment options for patients with cancer in Vanuatu. If the tumour cannot be removed by surgery the treatment becomes palliative as no chemotherapy nor radiotherapy is available. If patients have the financial capability they can travel to Australia or New Zealand for treatment. This makes cancer prevention programmes even more vital and I hope that NPH will soon have its own cytologist as there are rumours one might arrive in September, although the midwives are not optimistic.

I was able to talk to nurses about the provision of cervical screening across Santo at an educational retreat run by a missionary group.
Overall experience

Overall my experience in Vanuatu has confirmed my desire to specialise in O&G and I have become much more interested in the public health aspects associated with women’s health. During my visit I was able to attend a talk by a public health researcher and pacific specialist and I really took away the message that you cannot achieve anything in a developing country unless the community wants it to happen. The Ni-van community is remarkably health aware and the number of women attending antenatal appointments illustrates this. This is incredibly promising and means if the resources and expertise can be found to run large-scale public health programmes, such as HPV vaccination, pap-smears or STI testing, they are likely to be successful. This is inspiring and I hope in the future to be able to bring some of our expertise and technology into developing countries, such as Vanuatu, as these have the potential to make a big difference.

The dedication of all the staff at NPH is impressive and my lasting memory of the midwives will be a conversation with one lady who had worked there for twenty years. She felt so strongly about the service she is providing and the women she is helping that she has, with the help of her husband whose English is much better, drafted a proposal to expand the clinic. She was not afraid to take matters into her own hands and approach the government and charitable organisations for financial aid. Her sense of duty and community is impressive and something I hope to take away as I start to practise in the UK.
Research Project

Cervical Cancer Knowledge and Perception
Initially I had hoped to assess the knowledge and perception of cervical cancer prevention programmes in Vanuatu. Unfortunately too few health-care professionals were involved in these programmes and HPV vaccination had been limited to the island of Efate, even though we had initially thought it had been expanded to Santo. This study continues in the UK under the guidance of Dr Jo Waller at UCL.

Women's health in Vanuatu
As I have alluded to earlier in this report woman's status in society in Vanuatu differs from our expectations in the UK. During my elective I came across a number of anecdotal reports of the controlling husbands and women being denied freedom to make medical choices. The Vanuatu National Survey on Women’s Lives and Family Relationships assessed many aspects of women's live and some of the key finding pertaining to freedom of choice and coercion are listed below [3]. As a comparison data from Japan, described by the WHO’s Multi-country Study on Women's Health and Domestic Violence against Women, is given in brackets [4].

- 41% of women agreed that their husband would expect her to ask permission before she accessed healthcare. (Japan: 0.8%)
- 19% of women felt it was OK for a man to beat his wife if she did not become pregnant (Japan: 0.9%)
- 28% of women reported their first experience of sex was forced (Japan: 0%)

This prompted me to assess a number of factors affecting the wellbeing of women in order to confirm/refute anecdotal evidence for large family sizes, poor education and high rates of teenage pregnancy.

Background
A number of public health issues can be addressed by effective family planning and the implementation of successful family planning strategies requires a good understanding of a number of epidemiological and cultural traits. Since the introduction of the National Family Health Policy in 1990, family planning has been an important public health initiative [5]. This policy document was prepared in order to reduce maternal and infant mortality and in response to rapid population growth – Vanuatu's population grew 30% between 1989-1999 [6]. Fertility rates are falling and between 1979 – 2000 it declined from 6.5 children per women to 4.3 children per women [7].

This study aims to characterize family structure and a number of factors influencing family structure and the well being of women in Vanuatu. We also aimed to assess the requirement for family planning services amongst women in Santo by measuring desired vs actual family size.

Methods
A short, structured interview formed the basis of the study. This asked ten questions and obtained some key demographic information. The interviews were carried out in a local dialect – Bislama (a pigeon English with a dash of French), and the questions are at the end of the report. Interviews took place in the antenatal clinic and I was supported by two Ni-Van midwives who helped explain the purpose of the study and would gain consent in Bislama prior to the interviews.
Preliminary results

The results are detailed in the table and figure below. It should be noted that all women interviewed were pregnant and all time periods were recorded to the nearest year. The total number of women interviewed was 86 but where n<86 a number of women did not wish to answer or the question was not applicable. Comparisons to National census (2010) and the National Survey on Women's Lives and Family Relationships (2011) have also been included in brackets [3,8]. It should however be noted that our study only sampled women with children and therefore the characteristics of the group are likely to be different from the national data.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Max</th>
<th>Min</th>
<th>Mode</th>
</tr>
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<tbody>
<tr>
<td>Age at First Pregnancy (n=86)</td>
<td>20.5</td>
<td>30</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>Current number of Children (n=86)</td>
<td>1.8</td>
<td>6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Gap between children in years (n=42)</td>
<td>3.4</td>
<td>13</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Number of persons in a household (n=86)</td>
<td>6.1 (4.8)</td>
<td>26</td>
<td>2</td>
<td>3</td>
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Table 2

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Children attend school (n=74)</td>
<td>65%</td>
</tr>
<tr>
<td>Use family planning (n=85)</td>
<td>52% (50%)</td>
</tr>
<tr>
<td>Married (n=86)</td>
<td>63%</td>
</tr>
<tr>
<td>Children have more than one father (n=79)</td>
<td>27%</td>
</tr>
<tr>
<td>Currently employed (n=86)</td>
<td>28% (57%)</td>
</tr>
</tbody>
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Table 3

<table>
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<tr>
<th>Level of Education</th>
<th>Primary</th>
<th>Secondary</th>
<th>University</th>
<th>No School</th>
<th>Not Sure</th>
</tr>
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<tbody>
<tr>
<td>% of Women (n=84)</td>
<td>37 (55)</td>
<td>56 (35)</td>
<td>2 (4)</td>
<td>4 (7)</td>
<td>1</td>
</tr>
</tbody>
</table>

Tables 1-3. Data from this study is summarised across the tables. Data for comparison from national reports is given in (brackets and bold) [3,8]. Values are given to the one decimal place and percentages to the nearest percentage.
Figure 1. The percentage of women wanting more children based on their current number of children. The number current children does not include their current pregnancy.
Communication of results
The results of this study will be analysed further in association with all parties involved in the project and will be communicated to the Department of Women's Affairs in Vanuatu so they may be used as a reference for future work. The data captured describes a number of epidemiological traits effecting women's health and it is hoped that these will help to guide family planning strategies and may also serve as a baseline for measuring effectiveness of such programs. If appropriate we will seek to publish the results in a peer-reviewed journal.

Personal reflection
Undertaking a research project in a foreign country was challenging and we needed to address both language and cultural barriers. The hospital had arranged some Bislama lessons and these were invaluable as was a basic knowledge of French, which around 50% of the population speaks. Perhaps more challenging were the cultural barriers. The status of women in Ni-Van society and the paternalistic attitude of the medical services in Ni-Van culture had the potential to make women feel obliged to participate. They may have also felt intimidated by white interviewers. To help avoid the participants were made to feel at ease by providing a confidential environment and an explanation of the researchers background (our age, home country and family members) to "break the ice". This helped us develop a good rapport with the participants and it was rewarding to see women start to trust you and excited to talk about their children and family.

*Interviewing a woman for the project during the antenatal clinic*
Interview Questions.

Demographic Information:

1. Island of Origin
   • Yu blong wea?
2. Age
   • Hamas yia blog yu?

Interview Questions:

1. How many children do you have? How old are they?
   • Yu gat hamas pikinini?
   • First born gat hamas yias?
2. Do your children go to school?
   • Every pikinini blong yu go long skul?
3. Do you want more children (after this pregnancy)?
   • Yu wantem gat one more pikinini
4. Do you use contraception? What kind?
   • Yu usem any family planning? Wanem kind?
5. Are you married? Boyfriend?
   • Yu mared? Yu gat one boyfriend?
6. How long have you been in this relationship?
   • Yu stap wetem man blong yu hamas yia now?
7. Do all your children have the same father?
   • Yu bin gat one pikinini before yu stap wetem man blong yu?
8. How many people live in your house?
   • Yu gat hamas man women mo pikini i stap long house blong yu?
9. What class did you finish school?
   • Yu finish skul long wanem class? Primary or Secondary?
10. Do you work?
    • Yu work?
An application for ethical approval for this study was submitted and approved during the elective period by the Department of Public health, Vanuatu.

Verbal consent was taken from all individuals seen in photographs.

References: