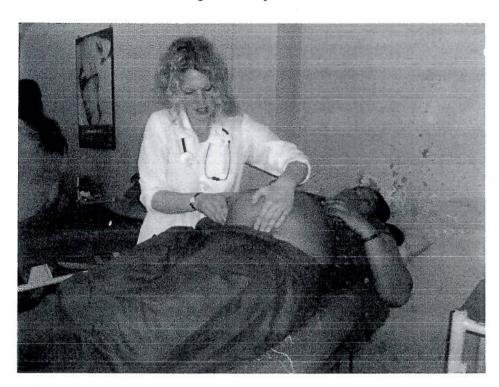


Anna Powles Medical Student Elective in Surgical Obstetrics and Gynaecology

Paropakar Government Maternity and Woman's Hospital, Thapthali, Kathmandu, Nepal

Supervised by Professor Pushpa Chaudhary (deopushpa@gmail.com 9851052755.)

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Learning Aims

- 1. To learn about the common problems in obstetrics and gynaecology experienced in Nepal and to compare and contrast these with those in the UK
- 2. To learn about the pattern of health provision in Nepal and to contrast this with the UK
- 3. To learn about the management of high risk obstetric cases and emergency obstetrics
- 4. To learn about uterine prolapse, the contributing factors, its affect on a woman's life and how it is managed.

Learning Objectives

- 1. To develop my clinical examination skills for obstetrics and gynaecology including
 - a. Per vaginal examination
 - b. Bimanual examination
 - c. Assessment of gestational age, fetal lie and engagement
 - d. Manual detection of fetal heart rate
 - e. Assessment of degree of pelvic organ prolapse
- 2. To observe and assist in surgical gynaecology cases
- 3. To observe and assist in cesarean section deliveries

My time at Paropakar Maternity Hospital has been not only extremely educationally stimulating but also personally fulfilling. I have been fortunate enough to have been integrated into one of the six hospital groups under the supervision of Professor Pushpa Chaudhary and welcomed as one of the team. I have had the opportunity to be involved in all aspects of the team's hospital work including gynaecology and antenatal outpatient clinics; operating theatres; case discussions; ward rounds; emergency room; labour room and night shifts. This has enabled me to develop my practical skills and given me a real hands-on experience of how Nepal's busiest Maternity and Women's hospital copes with its average of 60 births a day. I would like to start this report by thanking all those who have made this such a truly memorable and enjoyable experience.

Objective 1: What are the common problems in obstetrics and gyanecology experienced in Nepal and how do these compare with the UK?

The 1998 Nepal Government Maternal Mortality Report estimated maternal mortality ratio (MMR) to be 174:100,000 women ¹. The MMR in the UK in 2003-2005 was 14:100,000 women ². The stark difference in these figures reflects the differences in the economic status of these two countries and the availability of health care provision.

The Paropakar Government Maternity Hospital, established in 1961 is Nepal's largest Maternity and Women's hospital. Government incentives to reduce maternal mortality implemented in 2009 have greatly reduced the national mortality rates but as over 85% of Nepal's 27million population live in rural areas this remains a service only easily available to urban residents. The fact that most of Nepal's population rely on agriculture and manual labour as the primary source of work is integral to all the differences seen in health care provision and health care problems experienced here.

One of the major differences between problems seen in Nepal and the UK are that the majority of women (estimated 83%) still have home deliveries compared with just under 3% in the UK ¹. Where women in the UK may request and often have to argue for the right to have a home delivery women in Nepal often simply do not have this choice due to geographical constraints and the inability to leave the homestead for prolonged periods of time.

As a result of such high home delivery rates and inability to attend antenatal services 71% of maternal deaths are due to direct obstetric causes; 33% post partum haemorhage; 11% obstructed labour; 10% pre-eclampsia; 5% sepsis; 4% abortion; 4% antepartum haemorhage and 1% due to ectopic pregnancies ¹. In the UK the Confidential Enquiry into Maternal Deaths (CEMACH) 2003-2005 reveled just 31% of maternal deaths were due to direct causes; of which the leading cause, 31%, was venous thromboembolisim; followed by hypertensive disorders 14% and ante-partum/post-partum haemorhage 10%

Attendance at antenatal clinics has significantly increased from just 42% of women attending at least 1 antenatal visit in 1996 to 74% in 2006 ¹. However, only 29% of women achieve the recommendation of a minimum of 4 antenatal visits ¹. The result is that problems in pregnancy are frequently not detected until labour and during my elective I have seen women attending the emergency room with undiagnosed breech; pregnancy induced hypertension and pre-eclampsia and potentially sensitisied Rhesus negative blood group mothers whom have not received anti-D immunoglobulin.

The major difference in gyanecology problems experienced here are the high incidence of pelvic organ prolapse; advanced gyanecological malignancies and a much greater incidence of molar pregnancies and choricarcinomas compared with the UK. The most common gynaecological problems presenting at outpatients were comparable to those of

the UK such as mennorhagia due to fibroids and polycyctic ovarian syndrome with sub fertility and dysmenorhea.

Objective 2: Health care provision in Nepal compared with the UK

Although there are several government funded hospitals there is no National Health Service in Nepal. Government incentives to reduce maternal mortality involve the payment of 1000Rupees (approximately £7.50) to women delivering at hospital and reiumbursement of travel costs incurred in reaching the hospital. Correspondingly the annual birth rate at Paropakar Maternity Hopsital has risen steadily in the past 7 years. Hospital staff also receive a small incentive (approximately equivalent to 1000Rupees per month) and many of the consultants at Paropakar deposit this sum in a central fund which can be used for women whom are unable to afford their treatments and investigations.

Outpatient clinics, investigations and treatments must be paid for by the woman.

Proceedure/Investigation	Cost (Rupees)
Antenatal clinic visit	10
Ultrasound scan	400
Complete antenatal blood tests	3400
HIV test	Free
Anti D immunoglobulin	5000
Complete abortion care	1000

Table 1. Sample of routine costs at Paropakar hospital. Exchange rate approximately 135 Nepali rupees to 1 UK pound sterling.

During my elective I came across several women whom were unable to afford fetal anomaly scans at 20 weeks and one such case resulted in the birth of a severely congenitally deformed baby with bilateral upper and lower limb talipes and another case of late diagnosis of hydrocephalus.

The cost considerations mean that clinicians here must not only decide upon the most suitable investigations and management for the case presented but to take into account the economical consequences for each woman. In the case of a G4 P2+1 35 year old whom had not received anti-D immunoglobulin in any of her previous pregnancies the substantial cost of the immunoglobulin had to be considered. At 5000 rupees this would be considered a fortune for many families. After safe delivery of 3kg baby the maternal antibody titre was taken and as it was negative and the couple desired no further children the decision was made not to administer the immunoglobulin. In the UK we take for granted the routine availability of such treatments.

Learning objective 3: The management of high risk obstetric cases

Detection of fetal distress is based predominately on manual detection of the fetal heart rate using a stethoscope; maternal perception of fetal movements and the presence of meconium stained liquor. Unlike the UK where continuous cardiotography monitoring is the norm in high risk obstetric cases there are only two handheld Doppler ultrasound machines available and these are frequently difficult to locate when needed. The neonatal death rate is accordingly higher than that in the UK. The cesarean section rates are however comparable at approximately 20%.

During my time in the labour rooms I noticed that the rate of episiotomies is much higher than in the UK; I estimate it to be approximately 50% compared with just 14% in the UK ³. Reasons for such differences may include avoidance of damage to the pelvic floor muscles and a higher incidence of cephalo-pelvic disproportion.

In light of the high rate of home deliveries there is also a high incidence of women presenting to the hospital with post delivery complications. A 35 year old G2P2 presented to outpatients with a complete perineal tear and difficulty in defecating for the past 12 months since the home delivery of her baby. This type of case would be virtually unheard of in the UK. Another case involved a woman presenting 14 days post partum with PV bleeding. An explorative procedure in theatres revealed large amounts of retained placenta and the patient required 3 units of blood.

Objective 4: Uterine prolapse in Nepal.

Uterine prolapse is a common problem in Nepal with estimates of incidence ranging from 10-40% of parous women. Some of the key factors contributing to such high rates include mismanaged labour and prolonged 2nd stage of labour; multiparity; chronic cough and of particular note early return to heavy agricultural work.

During my elective I have seen over 30 cases of pelvic organ prolapse in women as young as 35 to cases of grade IV (procendtia) in elderly parous women. I have gained experience of this problem not only in gynaecology outpatients but also with a Dutch NGO team "Women for Women" with whom I spent 3 days assisting in theatres during their biannual prolapse camp in a hospital 30km outside Kathmandu.

I have been quite overwhelmed at the difficulties faced by many of these women whom have symptoms ranging from difficulty micturating to severe ulceration of the prolapsed uterus. Many women present with histories of over 5 years as they were either too embarrassed to seek further help or unable to afford treatment. The corrective surgery performed (anterior and posterior repairs; hysterectomy; sacrocolplexy and sacrospinous

ligament fixation) is potentially life changing for many of these women and experiencing this has cemented by ambitions to pursue a career in surgical gynaecology.

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