ELECTIVE REPORT;

OBSTETRICS AND GYNAECOLOGY

NEWHAM UNIVERSITY HOSPITAL 21/04/14 - 30/05/14

Objectives

1. *Describe the common obstetrics and gynaecology (O&G) complications in Newham compared to the rest of the U.K.*
2. *Describe the pattern of health provision in Newham compared to the rest of the U.K.*
3. *Explore the effect of HIV on maternity services and obstetric care in Newham.*
4. *Explore and gain experience in the different sub-specialties within O&G. Reflect on a clinical case and how it will affect my future clinical practice.*

Introduction

I chose to do my elective in Newham because it has one of the highest birth rates in the U.K. In 2009, the office of national statistics (ONS) released data on birth rate per local authority and Newham had the highest at 103 per 1,000 women [1]. In 2012 ONS data shows that the birth rate in Newham remains amongst the highest across the inner city London boroughs at 6,426 live births [2]. Furthermore, Newham has a diverse population with 64% being from Black, Asian and minority ethnic groups [3]. Newham has high rates of immigration and had the highest proportion of births to non-UK born women at 77% in 2011[4]. Also, Newham is amongst the most deprived areas in the country and is ranked third most deprived among the London boroughs after Hackney and Tower Hamlets [3]. Therefore, taking the above into consideration I chose Newham because I would see complex and challenging cases that I would not otherwise see in other parts of the country.

1. Common complications in Newham

❖ Obstetrics:

- *Still birth;*
  - Newham has highest incidence of still births in inner London 39 out of 282 in 2012 [5]
  - This is because the risk factors for it are more prevalent in Newham due to the population.
  - For example; obesity, smoking, gestational diabetes mellitus, hypertension, twin/multiple pregnancy, pre-eclampsia
- *Twins/multiple pregnancy*
  - More common in Newham because of ethnic population; Dichorionic twins (DZ) are more common in women of west African ancestry
  - Many occur as a result of In Vitro Fertilisation (IVF) e.g. 1 in 5 of

IVF pregnancies result in multiple births compared with 1 in 80 for women who conceive naturally [7]

- ➢ twin pregnancies are high risk as;
  - ✓ IUGR
  - ✓ Pre-term labour and prematurity
  - ✓ Risk of congenital abnormality associated with multiple pregnancies (2-4 times rate in singleton pregnancies) [9].
  - ✓ Perinatal mortality rate; for a twin it is 5 times the rate for singletons and for triplets it is 6 times the rate [9].
  - ✓ Maternal pregnancy-related complications, such as hyperemesis gravidarum, polyhydramnios, pre-eclampsia, anaemia, antepartum haemorrhage.
  - ✓ Complications in labour; malpresentation, placenta praevia, cord prolapse, premature separation of placenta, cord entanglement, postpartum haemorrhage.

- *Gestational diabetes mellitus (GDM)*;
  - ➢ Newham has a high population of South East Asians who are genetically predisposed to developing diabetes. About 31% of Newham residents are Indian, Pakistani or Bangladeshi [3]. In Newham women in this ethnic group are offered GTT at 28 weeks gestation.
- *Pre-eclampsia;*
  - ➢ As risk factors more prevalent in Newham
  - ➢ For example; BMI of 35, twin pregnancy, underlying medical conditions [6];

✓ Pre-existing hypertension.
✓ Pre-existing renal disease.
✓ Pre-existing diabetes.
✓ Antiphospholipid syndrome

- *Congenital abnormalities;*
  - ➢ The rate of consanguineous marriage is higher in Newham as it is practiced among people from north Africa, the Middle East and Asia
  - ➢ More at risk of autosomal recessive conditions
  - ➢ Are picked up on scans; referred to fetal medicine or after a previous still birth
  - ➢ Many are offered genetic counselling and prenatal testing

❖ *Gynaecology:*

- *Female genital mutilation;*
  - ➢ There are 3 types:
    - ✓ I. The partial or total removal of the clitoris
    - ✓ II. The partial or total removal of the clitoris and labia minora, with or without the excision of the labia majora
    - ✓ III. Infibulation; cutting and stitching together the labia minora, and/or labia majora, with or without the excision of the clitoris
  - ➢ It is estimated that 100-140 million women worldwide affected [10]
  - ➢ The highest incidence in Africa where it is known to be practiced in 28 countries as well as some parts of Asia and the Middle East [10]
  - ➢ The highest estimated numbers of women were from Kenya or Somalia

- From 2001-2005 a net estimated 3,000 women migrated to the UK [11]
- The highest estimates were in London where there is high rates of immigration from these countries [11]
- In Newham at booking, midwives ask about history of FGM and counselled accordingly e.g. that their female children are at risk of the practice and that it is illegal in the U.K.
- Women are referred for de-infibulation if they have type 3 FGM in the 2nd trimester if it has not been done prior to pregnancy.

- *Leiomyoma (Fibroids):*
  - More common in Afro-Caribbean women
  - Linked with obesity and high oestrogen levels

2. Health provision in Newham

In Newham there is more emphasis on Specialist midwife lead care rather than consultant in order to manage things that are more prevalent for example; GDM and obesity. Consultant midwives run clinics for VBAC, obesity/ high BMI and anti-D and can review scan reports.

Furthermore, resources go towards the things that are more prevalent in Newham such as obesity and GDM but also social issues such as domestic violence. As there is such a diverse immigrant population in Newham and many of whom are not fluent in English; there is more use of health advocates and language line.

3. Effect of HIV on maternity services and obstetric care in Newham

The diagnosed prevalence of HIV in black Africans is six times higher than white populations, which reflects the prevalence of HIV in their country of origin [12]. Over half a million black Africans live in London, which represents 7% of the London population [12]. Newham, Southwark, Lewisham, Lambeth and Croydon have the largest numbers of black Africans living with diagnosed HIV. Unlinked anonymous surveys indicate that the proportion of pregnant women with HIV in inner city London in 2011 was 0.3% (1 in 285) [13]

I spent time in clinic with the specialist HIV midwife; who this year has cohort of about 30 HIV pregnant women. I sat in on consultations and learnt about the care women receive in Newham;

- Regular once a month appointment with the midwife and consultant where they they monitor their viral load and CD4 count.
- Specialist MDT meeting to discuss the care of each woman which is complex as they have other psychological and social issues such as;
  - immigration and housing; women can claim residency based on their HIV status however if they are from counties such as Uganda or Nigeria where now there is better HIV care; they are declined
  - financial and family problems; being ostracised due to the stigma in the African community

- anxiety and depression

- All receive triple therapy (HAART) e.g. Truvada, Atazanavir, Ritonavir from 26 weeks gestation. This aims to make their viral load undetectable (>40 copies) and lowers the risk of mother to child transmission (MTCT).
- Birth choice; many opt for a vaginal delivery which is considered low risk providing their viral load is undetectable. However; forceps, ARM and FSE are avoided. If they choose or need a C-section then intravenous AZT is given before.
- Offered cabergoline post-natally to stop lactation as breast feeding is not possible (MTCT risk) and for psychological/ emotional reasons i.e. wanting to but not being able to breast feed despite lactating.
- The baby receives Zidovudine for 28 days and has HIV antibody testing for up to 18 months to determine HIV status

4. Sub-specialties and case reflection

In previous placements for O&G I have spent time among the different sub-specialties such as uro-gynae, gynae-oncology, infertility, early pregnancy. However, previously I had not had much exposure to fetal medicine. At Newham I had the opportunity to explore this speciality by spending time with my supervising consultant in clinic looking at detailed cardiac and growth scans. Furthermore, as my supervisor is a multiple pregnancy specialists, I had the opportunity to help with an audit looking at the management and outcome of monochorionic and dichorionic twins in relation to NICE and RCOG guidelines. For example; if they get the required amount of growth scans according to their chorionicity. Also in twin clinic I was exposed to the specialist counselling given to clients expecting twins, regarding congenital abnormalities, laser ablation for twin to twin transfusion syndrome and selective foeticide.

I enjoyed maternal medicine as a speciality because as well as gaining experience in the management of epilepsy, thyroid disease, and hypertension in pregnancy, obstetric cholestasis; I saw rare and interesting cases. For example;

- 33 year old G3 P2 woman who was diagnosed with Brugada Syndrome; an arrhythmia that causes Ventricular fibrillation and sudden death. She was diagnosed two years ago but got pregnant and declined an ICD so was classed high risk and at time of delivery a resuscitation trolley with defibrillator was planned.
- 29 year old G4 P4 woman who had a consanguineous marriage and had 2 still births because both children had Junctional Epidermolysis Bullosa; autosomal recessive connective tissue disorder causing blisters affecting 1 in 17,000.
- 33 year old G4 P3 who had polio as a child and had true cephalo-pelvic disproportion
- 32 G2 P0 woman who was an "elite suppressor" of HIV i.e. she is HIV antibody positive but her viral load is zero. She was to be started on triple therapy because there is still vertical transmission risk as cannot determine whether her viral load really is negligible. The assay may not have picked up the virus that she has. Everyone has a different virus as it undergoes mutation. However I learnt that when

these women are treated their CD4 count increases and this is used as a sign of response to treatment and reduces the risk of MTCT.

On labour ward I got to see complex obstetric care. For example; emergency C-section for APH, pre-term deliveries and neonatal resuscitation, external cephalic version, manual removal of placenta, counselling for still birth and management of pre-eclampsia. I also spent some time on maternity assessment unit and triage to see acute management in obstetrics. Furthermore, I saw follow up counselling of similar cases that I had seen on labour ward in post natal clinic.

In gynaecology clinic I got to see perineal tears, specialist vulval clinic; conditions like lichen sclerosis and ambiguous genitalia in a girl who had dysmorphic features.

❖ *Case reflection*

- 40 year old Asian
- 13/40 gestation
- ICSI with IVF, 3x frozen embryo transfer in UK
- Trichorionic
- Scan showed; cystic hygroma and fetal hydrops in twin 3
- Parents were counselled to options

1. Conservative (wait and watch); demise of 3rd
2. CVS for chromosomal abnormality
3. Selective reduction/foeticide to twin pregnancy

- Counselled to risks of miscarriage for above options as well
- Referred to tertiary centre St George's for appointment the same day
- Parents made decision for selective reduction

On reflection I thought all the options were very well explained in a way they could understand and with sensitivity. For my future clinical practice I want to aim to counsel patients in this way. Furthermore, this case highlighted ethics I was unaware of and was a good learning case. In the U.K it is illegal to transfer more than two embryos. All IVF centres have to report multiple pregnancies and the number of embryos transferred to the HFEA. For my future clinical practice I would wait to see if anything had been done regarding conduct of colleague etc. before reporting but would remain vigilant.

Conclusion

In conclusion, I have learned about the common O&G complications and pattern of health provision in Newham, as well as HIV in pregnancy and fetal medicine as a sub speciality. Furthermore, the elective placement has reinforced my interest in pursuing O&G as a career.

References

1. *http://www.theguardian.com/news/datablog/2010/may/25/birth-rate-statistics-england-wales*

2. *http://www.ons.gov.uk/ons/rel/vsob1/birth-summary-tables--england-and-wales/2012/rft-births-summary-tables-2012.xls*

3. *http://www.newham.info/Custom/LEA/Demographics.pdf*

4. *http://www.ons.gov.uk/ons/rel/vsob1/parents--country-of-birth--england-and-wales/2011/sb-parents--country-of-birth--2011.html*

5. *http://www.ons.gov.uk/ons/about-ons/business-transparency/freedom-of-information/what-can-i-request/published-ad-hoc-data/pop/april-2014/number-of-stillbirths-in-london-boroughs-by-area-of-usual-residence-of-mother--2012.xls*

6. *http://www.patient.co.uk/doctor/pre-eclampsia-and-eclampsia*

7. *http://www.hfea.gov.uk/Multiple-births-after-IVF.html*

8. *http://www.ons.gov.uk/ons/rel/vsob1/characteristics-of-birth-2--england-and-wales/2012/sb-characteristics-of-birth-2.html#tab-Key-findings*

9. *http://www.patient.co.uk/doctor/multiple-pregnancy*

10. *http://about-fgm.co.uk/about-fgm/world-prevalence/*

11. *http://about-fgm.co.uk/about-fgm/world-prevalence/uk-prevalence/*

12. *www.londoncouncils.gov.uk/.../FCLHPSEpidemiology.pdf*

13. *http://www.ucl.ac.uk/nshpc/slides*