Improving *Maternal Mortality* in Lithuania?

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Introduction

'Thomson tours' returned to Lithuania after a seven year absence. A multidisciplinary team of ten (fig.1) from four different UK hospitals participated in a two day conference in Klaipeda on '*Medical aspects of childbirth*'. There were three newcomers to our group (Thomson virgins!) and seven old hands (Thomson tarts!) so named by the girls during an excellent dinner, complete with a spectacular view, at the rooftop restaurant in the Klaipeda Hotel.

Making a difference?

It is unusual to have the opportunity and indeed it is perhaps a privilege to influence medical practice in another country. According to the WHO website maternal mortality in Lithuania between 1996 and 2003 has fallen by 60%. It seems that presentations ten years ago in Estonia at a WFSA Baltic anaesthesia conference organised by my late friend Dr Richard Jack helped introduce regional techniques for obstetric anaesthesia. The majority of elective caesarean sections are now done under spinal anaesthesia and epidural rates during labour in some hospitals have risen from nil to 40%.

The Outbound Journey from Gatwick

We arrived uneventfully in Vilnius and after avoiding a local rep. (fig 2) with the board advertising a 'stag party' we were met by our host Linas Rovas and translator Ruta for the four hour bus drive to the coastal town of Klaipeda. We stopped en route at an excellent restaurant overlooking a lake where we enjoyed lunch consisting of beer and 'zeppelins,' a local delicacy consisting of potato stuffed with meat. We arrived at our destination the Hotel Parkas just in time for supper.

Fig 1: The Team

The Team:

Miss K Baker, Director of Maternity Services, Southampton University Hospital;
Dr K. Thomson, Consultant Obstetric Anaesthetist, North Hampshire Hospital, Basingstoke;
Dr S. Mann, Consultant Anaesthetist, Child Advocacy International;
Miss J. Mountfield, Consultant Obstetrician, Southampton University Hospital;
Linas Rovas, Obstetrician , Klaipeda;
Miss S. Cunningham, Consultant Midwife, Southampton University Hospital;
Miss C. Iffland, Consultant Obstetrician, North Hampshire Hospital, Basingstoke;
Dr J. Eldridge, Consultant Obstetric Anaesthetist, Queen Alexandra Hospital, Portsmouth;
Ms M. Beattie, Modern Matron, Maternity Unit, North Hampshire Hospital, Basingstoke;
Dr G.Boden, Consultant Paediatrician, West Berks Hospital, Reading;
Ruta Rapnikiene, Obstetrician , Kaunas;
Ms J.Parnham, Evidence based medicine co-ordinator, Royal College of Physicians, London.

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Fig 2

Obstetrician Linas and midwife Kristina Staponkiene had visited the UK three months before to meet our team and to start finalising presentation topics and other arrangements.

Conference First Day

We were encouraged by the fact that Lithuanian obstetricians now seemed more enthusiastic than in 1999 to consider allowing midwives to assume responsibility for the management of normal labour. The presentations on the first morning were to all the delegates, both midwives and obstetricians but subsequently there were two conferences, one for doctors, (mainly obstetricians) and the other for midwives.

Three of the first four presentations given to the joint audience were delivered by midwives from our team and were organised intentionally to encourage the midwives present in the audience to participate.

The opening speaker was former midwife Jill who works at the Royal College of Physicians in London developing NICE guidelines. She gave an accomplished presentation underlying the philosophy of the whole conference which was the importance of using *evidence based medicine*.

She was followed by Suzanne (midwifery training in the UK) and Karen (foetal monitoring) and then Jo who gave a comprehensive talk about training of obstetricians in the UK. She started her presentation by contrasting the number of specialists and trainees at the main hospital in Vilnius with those at her hospital in Southampton. The Lithuanian hospital had 40 specialists and 15 obstetric trainees for 3,000 deliveries as compared with Southampton which has only 8 consultants and 25 trainees for 5,000.

She went on to say that the UK is the only European country which seems committed to honour the *European Working Time Directive*. UK trainees hours will soon drop from a maximum of 56 to 48 hours per week with an obligatory 11 hours off after the longest permitted shift of 13 hours. Government policy seems to be to create more specialists who can be resident on call but fewer consultants.

She went on to explain how trainees were assessed and examined and finished with a quote from Machiavelli, "*there is nothing more difficult to carry out, nor more dangerous to handle than to initiate a new order of things*".

Jo gave another presentation emphasising the importance of 'skills and drills' training for midwives and SHOs with particular reference to major obstetric haemorrhage. She reminded the audience of the 'four Ts' of post partum haemorrhage, Tone (70%), Trauma (20%) Tissue (10%) and Thrombin (1%). She also discussed the indications for rectal Misoprostol 800 mg, Intramyometrial Carboprost 250 mcgs, Tranexamic acid and Vitamin K. She stressed the importance during major obstetric haemorrhage of a designated scribe to write down events and treatment.

Paediatrician Greg from Reading discussed *birth asphyxia* which he said occurs between two and seven infants per thousand born but was not the most common cause of long term neurological damage. He said that high levels of lactase and low levels of ATP were correlated with outcome. He mentioned therapies to decrease secondary brain damage.

After his talk he was given a severe 'handbagging' in Lithuanian by an elderly lady doctor in the audience who apparently claimed he was trying to change the order of the Universe by cooling asphyxiated infants. She said they were destined to become a special group of brain damaged people and by intervening he would alter the balance of the Cosmos!

James gave presentations on *pre-clampsia* and also on *walking epidurals*. He showed impressive video clips of a woman whose sense of balance was unaffected by CSE labour analgesia. But he did say that this technique led to no improvement in vaginal delivery rate.

Margaret gave a presentation on instrumental delivery which occurs in10-15% of all deliveries in the UK. Indications include foetal compromise, maternal fatigue and inadequate progress in stage 2 (nullips two hours without epidural three hours with and multips one hour without and two hours with). Contraindications included foetal bleeding disorders or cases where there was a risk of vertical transmission of infection to the baby i.e. HIV.
She explained that her training to become a 'midwife Ventouse practitioner' required 180 hours of 'study and reflection.'

Claire in her presentation on *vaginal birth after Caesarean* (VBAC) stated that the death rate resulting from elective caesarean section was 82.3 per million as opposed to 16.9 per million for vaginal delivery (ie five times greater). But that associated with emergency Caesarean was twelve times. The risk of uterine rupture was 35 per 10,000 for VBAC compared to 12 per 10,000 for elective Caesarean but the risk of the baby dying was 10 per 10,000 for VBAC as opposed to 1 per 10,000 for elective Caesarean. Induction of labour with prostaglandins increases the risk from uterine rupture to 240 per 10,000

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compared with 80 per 10,000 when prostaglandins are not used.

I gave two lectures, the first of which *feeding in labour* emphasised the two factors that put women at risk of aspiration during general anaesthesia which were active labour and opiates. Studies have shown that gastric emptying in pregnant women who are not in labour is normal in all trimesters.

My second talk was entitled *Maternal Morbidity and Mortality in Africa*. This started by saying that the causes of mortality in Africa were similar to those in the UK prior to availability of blood transfusions, oxytocics and antibiotics. Prolonged obstructed labour in Africa often leads to the development of vesico vaginal fistula. Mention was made of Mercy Ships VVF repair programmes for these unfortunate women both on board the *Anastasis* and in a land based hospital in Freetown, Sierra Leone. (**www.mercyships.org.uk**)

Susan gave a presentation on the latest *European guidelines for maternal and neonatal resuscitation*. She followed this up with a successful morning running a practical demonstration session for midwives.

The Midwifery Conference

Karen noticed a difference between the 1998 and 1999 Vilnius conferences when no one asked questions and now in 2006 when the audience were much more vocal and participant. She also felt that the midwives were generally more confident with a good number expressing a wish to be more autonomous in their practice.

Many were realising that the time is now right for this to happen due to a combination of support from local obstetricians and their own personal confidence. However, as in England, the usual negative crowd were there but were not allowed much air time by their enthusiastic colleagues. Margaret's reflection were firstly that skills and drills would be beneficial for future conferences and that the midwives also need workshops tailored to their needs on subjects like normal birth, birth environment and leadership within normal and complex pregnancy.

They will need to gain skills, knowledge and competencies to feel autonomous within their areas. They also need to have an understanding of the structure of midwifery supervision and organisation.

Food for thought?

On both days we were provided with an excellent four course lunch, followed in the evening by more than adequate dinners. The second of which was in a restaurant on the 12th floor of the Klaipeda hotel providing a spectacular view of the city particularly that seen from the 'throne' in a completely glass fronted toilet room.

Fig 3

Summary

Overall the conference seemed to run smoothly, due to the effort of our host Linas who seemed to be the sole organiser. Although some of the audience (fig 3) were not as enthusiastic as others! Perhaps it would have been helpful to have had a second official translator but obstetrician Ruta did extremely well and sensibly insisted that Linas himself helped her during the second day. It would have been helpful if all speakers had been instructed to keep to time. Jo had a dilemma during an afternoon session when her co-chair was also the presenter and spoke (in Lithuanian) for more than double his allocated time of 30 min.

Fig 4

The local maternity unit with some unusual signs (fig 4) seemed more modern and better equipped compared with those which we had seen in Vilnius seven or eight years ago.

We were well looked after and met delightful and charming people in this country which broke away from Soviet oppression in 1992 and has now become one of the most recent of our EU partners.

Post script

My first visit to the Baltic States was to Estonia in 1996 as part of a WFSA team organised by my friend and former Wexham Park Hospital anaesthetic colleague, Dr Richard Jack (fig 5).

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Fig 5

Sadly Dick, as he was known, passed away in July 2006. He introduced me to the fun involved in taking a group of people who are not only fellow medical professionals but also interesting companions, for a long weekend to fascinating parts of Europe to participate in a conference at which one meets and shares ideas with local medical staff both formally and socially.

It is remarkable how much can be achieved in only four days. Our host Linas Rovas repeatedly asked me both in the UK and in Lithuania why I organised these conferences, I hope I have now answered his question.

Update – April 2007

Obstetrician Linas Rovas is currenty working for a month at the North Hampshire Hospital as a locum ultrasonographer. He tells me that our visit to his hospital in Klaipeda was the catalyst to start the first midwifery led unit in the Baltic States.

Ref: Thomson.Vilnuis