

and Gynaecologists

National Perinatal Epidemiology Unit

# NEWSLETTER 45 - April 2016

UK Obstetric Surveillance System

## **Massive Transfusion Study Published**

Postpartum haemorrhage (PPH) remains a common cause of maternal morbidity and mortality worldwide, however, little is known about the incidence, management and outcomes of women with severe PPH undergoing massive transfusion. The aims of this study were to ascertain the incidence of massive transfusion in obstetrics in the UK, and describe the current management practices and clinical outcome for these women.

The study identified 181 women who had undergone massive transfusion, giving an estimated incidence of 23 per 100 000 maternities (95%CI 19–26). The median estimated blood loss was 6 I (interquartile range 4.5–8.0 I) and the principle causes of haemorrhage were uterine atony (40%), placental abnormalities (33%) and trauma including uterine rupture (19%). At presentation, the median platelet count was lowest for placenta accreta, compared with other causes, while the median prothrombin time and fibrinogen were <1.5 times normal and <3 g/l, respectively for all aetiologies. The median platelet count and fibrinogen fell to <75 × 10<sup>9</sup> /l and <2 g/l, respectively for all causes during bleeding, except for trauma. In total, 45% of women underwent hysterectomy; women with placenta accreta had the highest hysterectomy rate. Two women died, 82% were admitted to intensive care/high-dependency units, and 28% developed major morbidities.

This study showed that massive transfusion due to PPH is associated with high rates of morbidity and hysterectomy. The coagulopathy in women with PPH undergoing massive transfusion differs significantly depending on its cause, suggesting that more targeted transfusion strategies are required.

#### **References:**

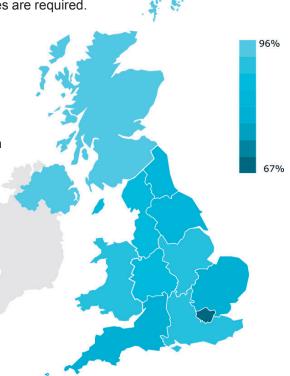
THIS MONTH

Green L, Knight M, Seeney FM, Hopkinson C, Collins PW, Collis RE, Simpson N, Weeks A, Stanworth SS. The epidemiology and outcomes of women with postpartum haemorrhage requiring massive transfusion with eight or more units of red cells: a national cross-sectional study. BJOG 2015 (Epub ahead of print).

Green L, Knight M, Seeney F, Hopkinson C, Collins PW, Collis RE, Simpson NA, Weeks A, Stanworth SJ. The haematological features and transfusion management of women who required massive transfusion for major obstetric haemorrhage in the UK: a population based study. Br J Haematol. 2015 (Epub ahead of print).

### The UKOSS Annual Report is going electronic!

From July 2016 the annual report will be published electronically via the UKOSS website and Twitter with a very limited number of printed copies available on request. Please note that all UKOSS reporters will continue to receive the report via email



UKOSS Regional Card Return Rates Map December 2015 – February 2016

New study: Zika Virus in PregnancyMeet a UKOSS reporter



#### Thanks to the following hospitals who have returned cards for December 2015, January and February 2016:

Aberdeen Maternity Hospital, Aberdeen Airedale General Hospital, Keighley Altnagelvin Area Hospital, Londonderry Antrim Hospital, Antrim Ayrshire Maternity Unit, Kilmarnock Barnet and Chase Farm NHS Trust Maternity Unit, Barnet Basildon Hospital, Canvey Island Bassetlaw District General Hospital, Worksop Birmingham Heartlands Hospital, Birmingham Birmingham Women's Hospital, Birmingham Borders General Hospital, Borders Bradford Royal Infirmary, Bradford Bronglais Hospital, Broomfield Hospital, Chelmsford Caithness General Hospital, Wick Calderdale Royal Hospital, Halifax Causeway Hospital, Coleraine Chesterfield & North Derbyshire Royal Hospital, Chesterfield City Hospitals Sunderland NHS Trust, Sunderland Countess of Chester Hospital, Chester Craigavon Area Hospital, Portadown Croydon University Hospital, Thornton Heath Daisy Hill Hospital, Newry Darent Valley Hospital, Dartford Darlington Memorial Hospital, Darlington Derby Hospitals NHS Foundation Trust, Derby Derriford Hospital, Plymouth Dewsbury and District Hospital, Dewsbury Diana Princess of Wales Hospital, Grimsby Doncaster Royal Infirmary, Doncaster Dorset County Hospital, Dorchester Dr Gray's Hospital, Elgin Dumfries & Galloway Royal Infirmary, Dumfries Forth Valley Royal Hospital, Larbert Frimley Park Hospital, Camberley George Eliot Hospital, Nuneaton Glan Clwyd District General Hospital, Bodelwyddan Gloucestershire Royal Hospital, Gloucester Good Hope Hospital, Sutton Coldfield Guy's and St Thomas' Hospital, London Harrogate District Hospital, Harrogate Hinchingbrooke Hospital NHS Trust, Huntingdon Homerton University Hospital, London Hull Royal Infirmary, Hull Ipswich Hospital, Ipswich James Cook University Hospital, Middlesbrough James Paget University Hospitals Trust, Great Yarmouth Jersey General Hospital, St Helier Kettering General Hospital, Kettering King's College Hospital, London King's Mill Hospital, Sutton in Ashfield Leighton Hospital, Crewe Lincoln County Hospital, Lincoln Lister Hospital, Stevenage Liverpool Women's Hospital, Liverpool Macclesfield District General Hospital, Macclesfield Manor Hospital, Walsall Medway Maritime Hospital, Gillingham Milton Keynes Hospital NHS Foundation Trust, Milton Keynes Nevill Hall Hospital, Abergavenny Ninewells Hospital & Medical School, Dundee Nobles Hospital, Douglas Norfolk & Norwich University Hospital, Norwich North Devon District Hospital, Barnstaple North Manchester General Hospital, Manchester Northampton General Hospital, Northampton Northwick Park Hospital, Harrow Nottingham City Hospital, Nottingham

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Peterborough City Hospital, Peterborough Pilgrim Hospital, Boston Pinderfields General Hospital, Wakefield Poole Hospital. Poole Prince Charles Hospital, Methyr Tydfil Princess Alexandra Hospital, Harlow Princess Anne Hospital, Southampton Princess Elizabeth Hospital, St Martins Princess Royal Hospital, Telford Queen Charlotte's and Chelsea Hospital, London Queen Elizabeth Hospital, Gateshead Queen Elizabeth Hospital, Kings Lynn Queen Elizabeth Hospital, London Queen Elizabeth the Queen Mother Hospital, Margate Queen's Medical Centre, Nottingham Raigmore Hospital, Inverness Royal Albert Edward Infirmary, Wigan Royal Alexandra Hospital, Paisley Royal Cornwall Hospital, Truro Royal Devon & Exeter Hospital, Exeter Royal Glamorgan Hospital, Llantrisant Royal Oldham Hospital, Oldham Royal Preston Hospital, Preston Royal Surrey County Hospital, Guildford Royal Sussex County Hospital, Brighton Royal Victoria Infirmary, Newcastle-upon-Tyne Russells Hall Hospital, Dudley Scarborough Hospital, Scarborough Scunthorpe General Hospital, Scunthorpe Simpson Centre for Reproductive Health, Edinburah Singleton Hospital, Swansea South Tyneside NHS Foundation Trust, South Shields South West Acute Hospital, Enniskillen Southend University Hospital NHS FT, Westcliffon-Sea Southern General Hospital, Glasgow Southmead Hospital, Bristol St Helier Hospital, Carshalton St James's University Hospital, Leeds St John's Hospital, Livingston St Mary's Hospital, London St Mary's Hospital, Manchester St Mary's Hospital, Newport St Michael's Hospital, Bristol St Peter's Hospital, Chertsey St Richard's Hospital, Chichester Stoke Mandeville Hospital, Aylesbury Taunton and Somerset Hospital, Taunton The Great Western Hospitals NHS Foundation Trust, Swindon The Hillingdon Hospitals NHS Foundation Trust, Uxbridge The Portland Hospital, London The Tunbridge Wells Hospital, Tunbridge Wells Torbay Hospital, Torquay Ulster Hospital, Belfast University Hospital Lewisham, London University Hospital of Coventry & Warwickshire, Coventry University Hospital of North Durham, Durham University Hospital of North Staffordshire, Stoke on Trent University Hospital of North Tees, Stockton-on-Tees University Hospital of Wales, Cardiff Victoria Hospital, Blackpool Victoria Hospital, Kirkcaldy Wansbeck General Hospital, Ashington Warrington and Halton Hospitals NHS FT, Warrington Warwick Hospital, Warwick

West Cumberland Hospital, Whitehaven West Middlesex University Hospital, Isleworth West Suffolk Hospital, Bury St Edmunds West Wales General Hospital, Carmarthen Western Isles Hospital, Stornoway Wexham Park Hospital, Slough Whiston Hospital, Prescot William Harvey Hospital, Ashford Wishaw General Hospital, Wishaw Worcestershire Royal Hospital, Worcester Wrexham Maelor Hospital, Wrexham Yeovil Women's Hospital, Yeovil York Hospital, York Ysbyty Gwynedd District General Hospital, Bandor Birmingham City Hospital, Birmingham Chelsea & Westminster Hospital, London East Surrey Hospital, Redhill East Sussex Healthcare NHS Trust, St Leonardson-Sea Epsom General Hospital, Epsom Furness General Hospital, Barrow-in-Furness Horton Maternity Hospital, Banbury Kingston Hospital, Kingston upon Thames Leicester General Hospital, Leicester Luton & Dunstable Hospital, Luton New Cross Hospital, Wolverhampton North Hampshire Hospital, Basingstoke Princess of Wales Hospital, Bridgend Princess Royal Hospital, Haywards Heath Princess Royal Maternity Hospital, Glasgow Queen's Hospital, Burton upon Trent Queen's Hospital, Romford Rosie Maternity Hospital, Cambridge Royal Berkshire Hospital, Reading Royal Bolton Hospital, Bolton Royal Lancaster Infirmary, Lancaster Royal United Hospital, Bath Southport & Ormskirk Hospital NHS Trust, Ormskirk St George's Hospital, London Stepping Hill Hospital, Stockport Tameside General Hospital, Ashton-under-Lyne Whittington Hospital, London Worthing Hospital, Worthing Arrowe Park Hospital, Wirral Barnsley Hospital NHS Foundation Trust, Barnsley Bedford Hospital, Bedford Hereford County Hospital, Hereford John Radcliffe Hospital, Oxford Lancashire Women and Newborn Centre, Burnley Queen Alexandra Hospital, Portsmouth Royal Free Hospital, London Royal Gwent Hospital, Newport Royal Hampshire County Hospital, Winchester Royal Jubilee Maternity Service, Belfast Salisbury District Hospital, Salisbury University College Hospital, London Watford General Hospital, Watford Wythenshawe Hospital, Manchester Colchester General Hospital, Colchester Cumberland Infirmary, Carlisle Leeds General Infirmary, Leeds Leicester Royal Infirmary, Leicester Newham General Hospital, London North Middlesex University Hospital, Edmonton Princess Royal University Hospital, Orpington Rotherham District General Hospital, Rotherham Royal London Hospital, London The Jessop Wing, Sheffield

Whipps Cross University Trust Hospital, London

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Returned all three cards. Returned two cards. Returned one card. No Cards Returned.

### New UKOSS study has started! Zika Virus in Pregnancy: how to report

A new UKOSS study on Zika virus in pregnancy began in March 2016. The reporting for this study is slightly different to other UKOSS studies.

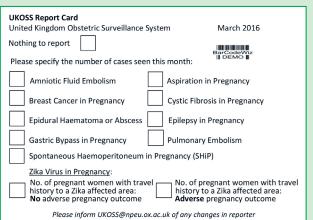
On each monthly report card, reporters are requested to report **the numbers** of women in their unit who fall into each of the following categories:

- 1. Any pregnant woman with a history of travel to a country with active Zika virus transmission during pregnancy or 4 weeks before conception and no adverse pregnancy outcome.
- 2. Any pregnant woman with a history of travel to a country with active Zika virus transmission during pregnancy or 4 weeks before conception where there has been an adverse pregnancy outcome, such as a fetal abnormality, miscarriage, stillbirth, neonatal death or termination of pregnancy.

Please note that reporters will only be requested to complete a data collection form for those women who did experience adverse pregnancy outcomes.

You will have recently received the first card featuring Zika reporting, which looks like this:

If you have any queries, then please don't hesitate to get in touch with the UKOSS team at *ukoss@npeu.ox.ac.uk* 



### **Epilepsy study: identifying controls**

The Epilepsy study is a case-control study and we will soon be requesting data for the controls. Reporters will be asked to complete data collection forms for the first two women who deliver in their unit in **June 2016** who have epilepsy but do not meet the criteria for UKOSS cases. We will shortly be circulating further information regarding the identification of controls; however in the meantime, please contact *ukoss@npeu.ox.ac.uk* if you have any queries.

### Case report summary for current studies up until the end of Feb 2016

Disorder	Actual number of reported cases	Data collection forms returned (%)	Expected number of confirmed cases
Amniotic Fluid Embolism	223	214 (96)	133
Aspiration in Pregnancy	13	11 (85)	37
Breast Cancer	21	9 (43)	25
Cystic Fibrosis	53	41 (77)	52
Epidural Haematoma or Abscess	15	12 (80)	4
Epilepsy in Pregnancy	111	57 (51)	210
Gastric Bypass in Pregnancy	307	250 (81)	69
Pulmonary Embolism	201	139 (69)	150
SHiP	1	1 (100)	2

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### Meet longstanding UKOSS reporter, Anne-Marie Whiting

#### Who is your employer and what is your job title?

I am employed part time by Torbay and South Devon NHS Foundation Trust and I am employed as the Clinical Governance Coordinator for Obstetrics and Gynaecology.

#### Can you give a brief summary of your career to date?

I undertook my midwifery training in Exeter in 1988, and came to work at Torbay after qualifying. I initially worked on the special care baby unit whilst waiting for a midwifery vacancy. I have worked in both hospital and community settings within the Trust. I was involved in setting up the first pilot team midwifery in 1992. I became a supervisor of midwives in 1998, and I have been in my current post since 2002.

## What are the main duties/responsibilities of your current role?

I have a very varied role I manage all the clinical incidents, undertake serious case reviews, and manage the review of all the policies and guidelines. I coordinate audit, complaints and litigation in the department. I lead the review of National reports and NICE guidance. I am also the contact Supervisor of Midwives.

#### What do you enjoy most about your current job?

I work within a very supportive team of midwives, medical staff, and also the administrative support team. I share an office with three Matrons and we have a great camaraderie. The trust values the role and I have two midwives who support, Jo Blacker who is an audit midwife and Helen Saad who also works one day in Clinical Governance with me.

### How does being a UKOSS reporter add to your role at work (if at all)?

Being in this role for this amount of time I have reported and investigated many of the studies that UKOSS have undertaken. I have investigated maternal deaths into some of the rare direct causes, and seen the learning come into practice from the studies. Reading around the new studies also gives me a new understanding of the rare conditions.



### **Gastric Bypass**

This study has now ended. Please can all UKOSS reporters check that they have reported all cases of women delivering between 1st April 2014 and 1st April 2016 following gastric bypass surgery, and ensure that any outstanding data collection forms are completed and returned as soon as possible. Thank you.

How long have you been a UKOSS reporter?

I have been a UKOSS reporter since its inception!

## How do you manage/co-ordinate the UKOSS reporting in your hospital?

We are a relatively small unit with approximately 2500 deliveries a year, however Torbay is the most deprived council in the south west which brings with it many other socio economic challenges. I receive the "blue cards" and through our regular case reviews and meetings am able to identify cases. We have the UKOSS posters up in the antenatal clinic and inform all midwifery and medical colleagues both obstetric and anaesthetic of the studies. I respond to requests when cases are low in numbers via email to the individual teams. Jo and Helen support me so between us we strive to identify cases, and complete the forms timely and thoroughly!

## Would you recommend becoming a UKOSS reporter to others and why?

I would definitely recommend it. It alerts you to present studies, and it's really rewarding seeing the study results. Ultimately you are helping to improve the outcome for women and their babies. Oh yes, and great for nursing and midwifery revalidation!

#### Do you have any hobbies/ what are your interests outside of work?

I swim (quite well), and play tennis (not so well) regularly. I also enjoy walking around the South Devon coastline, and I am in the process of trying to complete all the sections of the South West Coast Path. I enjoy reading and always have a book on the go.



Chocolate Box



Chocolates this month go to Mrs Sally Budgen at Royal Cornwall Hospital and Ms Susan Weekes/ Judith Lowther at Bradford Royal Infirmary for timely return and accurate completion of cards and data collection forms.

Many thanks to you both!



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