



Royal College of
Obstetricians
and Gynaecologists

Pregnancy outcome in patients with sickle cell disease in the UK - a national cohort study comparing sickle cell anaemia (HbSS) with HbSC disease

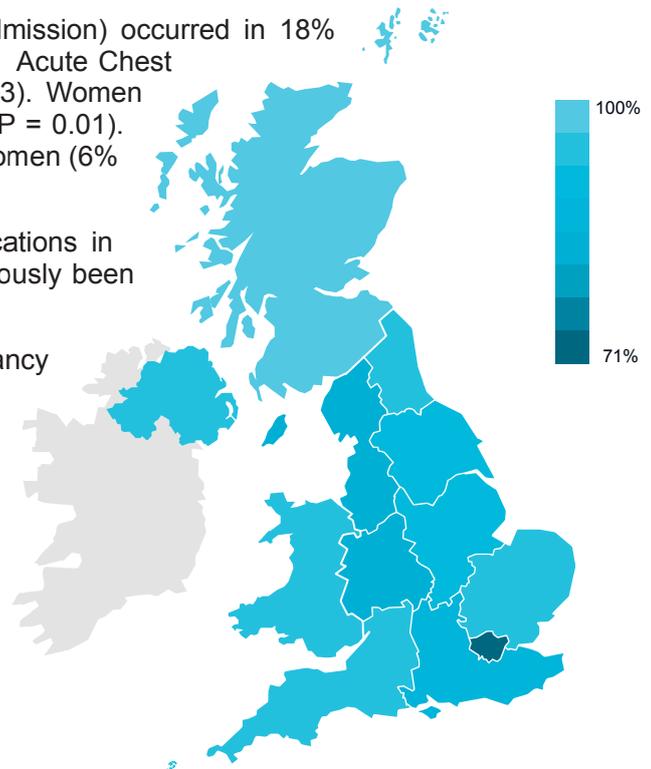
The results of the UKOSS Sickle Cell Disease Study have now been published. Historical data suggest that sickle cell disease (SCD) in pregnancy is associated with a high incidence of maternal and fetal complications; however there have been few recent studies and there is a lack of knowledge about fetal and maternal outcomes and management of women with SCD. The objectives of this study were to describe maternal and fetal outcomes of SCD in pregnancy in the UK and to compare outcomes in the two most common genotypes, HbSS and HbSC using UKOSS.

One hundred and nine pregnancies in women with SCD were reported over one year; the majority (88%) were Black Caribbean or Black African women. 51 women (47%) had HbSS and 44 (40%) had HbSC. It was found that women with HbSS were significantly more likely than women with HbSC to receive a transfusion during pregnancy (43% vs. 7%), have a painful crisis during pregnancy (77% vs. 27%) or postnatally (22% vs. 2%), and to be admitted to an intensive care unit (29% vs. 11%).

Severe or extreme crises (requiring hospital attendance or admission) occurred in 18% of women with HbSS and 9% of women with HbSC (P = 0.23). Acute Chest Syndrome was seen in both HbSS and HbSC (10% vs. 5%, P = 0.3). Women with HbSS were more likely to deliver at <37 weeks gestation (P = 0.01). Delivery at <34 weeks was increased in both HbSS and HbSC women (6% vs. 5%) compared to national data.

This study confirms a high rate of maternal and fetal complications in mothers with SCD, even in women with HbSC, which has previously been considered to have a more benign phenotype in pregnancy.

Reference: Oteng-Ntim E, Ayensah B, Knight M, Howard J. Pregnancy outcome in patients with sickle cell disease in the UK – a national cohort study comparing sickle cell anaemia (HbSS) with HbSC disease. *British Journal of Haematology*. 2015;169(1):129-37.



UKOSS Regional Card Return Rates Map
March 2015 to May 2015

THIS MONTH

- New studies coming soon
- Meet one of our researchers



Thanks to the following hospitals who have returned cards for February, March and April 2015:

Aberdeen Maternity Hospital, Aberdeen
Airedale General Hospital, Keighley
Alexandra Hospital, Redditch
Altnagelvin Area Hospital, Londonderry
Ayrshire Maternity Unit, Kilmarnock
Barnet and Chase Farm NHS Trust Maternity Unit, Barnet
Basildon Hospital, Canvey Island
Bassetlaw District General Hospital, Worksop
Bedford Hospital, Bedford
Birmingham Heartlands Hospital, Birmingham
Birmingham Women's Hospital, Birmingham
Borders General Hospital, Borders
Bradford Royal Infirmary, Bradford
Bronglais Hospital, Aberystwyth
Broomfield Hospital, Chelmsford
Caithness General Hospital, Wick
Calderdale Royal Hospital, Halifax
Chelsea & Westminster Hospital, London
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
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
Ealing Hospital NHS Trust, London
East Sussex Healthcare NHS Trust, St Leonards-on-Sea
Epsom General Hospital, Epsom
Forth Valley Royal Hospital, Larbert
Frimley Park Hospital, Camberley
Furness General Hospital, Barrow-in-Furness
George Eliot Hospital, Nuneaton
Gloucestershire Royal Hospital, Gloucester
Good Hope Hospital, Sutton Coldfield
Harrogate District Hospital, Harrogate
Hinchingsbrooke Hospital NHS Trust, Huntingdon
Horton Maternity Hospital, Banbury
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
Lancashire Women and Newborn Centre, Burnley
Leeds General Infirmary, Leeds
Leighton Hospital, Crewe
Lincoln County Hospital, Lincoln
Lister Hospital, Stevenage
Liverpool Women's Hospital, Liverpool
Luton & Dunstable Hospital, Luton
Macclesfield District General Hospital, Macclesfield
Medway Maritime Hospital, Gillingham
Milton Keynes Hospital NHS Foundation Trust, Milton Keynes
Nevill Hall Hospital, Abergavenny
New Cross Hospital, Wolverhampton
Ninewells Hospital & Medical School, Dundee
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
Peterborough City Hospital, Peterborough
Pilgrim Hospital, Boston
Pinderfields General Hospital, Wakefield
Poole Hospital, Poole
Prince Charles Hospital, Methyr Tydfil
Princess of Wales Hospital, Bridgend
Princess Royal Hospital, Haywards Heath
Princess Royal Maternity Hospital, Glasgow
Queen Alexandra Hospital, Portsmouth
Queen Elizabeth Hospital, Gateshead
Queen Elizabeth Hospital, Kings Lynn
Queen Elizabeth the Queen Mother Hospital, Margate
Queen's Medical Centre, Nottingham
Raigmore Hospital, Inverness
Rosie Maternity Hospital, Cambridge
Royal Albert Edward Infirmary, Wigan
Royal Alexandra Hospital, Paisley
Royal Berkshire Hospital, Reading
Royal Bolton Hospital, Bolton
Royal Cornwall Hospital, Truro
Royal Devon & Exeter Hospital, Exeter
Royal Glamorgan Hospital, Llantrisant
Royal Hampshire County Hospital, Winchester
Royal Jubilee Maternity Service, Belfast
Royal Oldham Hospital, Oldham
Royal Preston Hospital, Preston
Royal Surrey County Hospital, Guildford
Royal Sussex County Hospital, Brighton
Royal United Hospital, Bath
Royal Victoria Infirmary, Newcastle-upon-Tyne
Russells Hall Hospital, Dudley
Scarborough Hospital, Scarborough
Scunthorpe General Hospital, Scunthorpe
Singleton Hospital, Swansea
South Tyneside NHS Foundation Trust, South Shields
South West Acute Hospital, Enniskillen
Southend University Hospital NHS FT, Westcliff-on-Sea
Southern General Hospital, Glasgow
Southmead Hospital, Bristol
St George's Hospital, London
St Helier Hospital, Carshalton
St John's Hospital, Livingston
St Mary's Hospital, Manchester
St Mary's Hospital, Newport
St Michael's Hospital, Bristol
St Peter's Hospital, Chertsey
Stoke Mandeville Hospital, Aylesbury
Taunton and Somerset Hospital, Taunton
The Great Western Hospitals NHS Foundation Trust, Swindon
The Jessop Wing, Sheffield
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 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
Watford General Hospital, Watford
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
Whittington Hospital, London
William Harvey Hospital, Ashford
Wishaw General Hospital, Wishaw
Worcestershire Royal Hospital, Worcester
Wrexham Maelor Hospital, Wrexham
York Hospital, York
Ysbyty Gwynedd District General Hospital, Bangor
Antrim Hospital, Antrim
Arrowe Park Hospital, Wirral
Barnsley Hospital NHS Foundation Trust, Barnsley
Birmingham City Hospital, Birmingham
Causeway Hospital, Coleraine
Colchester General Hospital, Colchester
Darlington Memorial Hospital, Darlington
East Surrey Hospital, Redhill
Glan Clwyd District General Hospital, Bodelwyddan
Guy's and St Thomas' Hospital, London
Hereford County Hospital, Hereford
John Radcliffe Hospital, Oxford
Kingston Hospital, Kingston upon Thames
Leicester Royal Infirmary, Leicester
Manor Hospital, Walsall
Newham General Hospital, London
Nobles Hospital, Douglas
North Hampshire Hospital, Basingstoke
North Middlesex University Hospital, Edmonton
Princess Alexandra Hospital, Harlow
Princess Anne Hospital, Southampton
Princess Elizabeth Hospital, St Martins
Queen Charlotte's and Chelsea Hospital, London
Queen Elizabeth Hospital, London
Queen's Hospital, Burton upon Trent
Queen's Hospital, Romford
Rotherham District General Hospital, Rotherham
Royal Free Hospital, London
Royal Gwent Hospital, Newport
Royal Lancaster Infirmary, Lancaster
Salisbury District Hospital, Salisbury
Simpson Centre for Reproductive Health, Edinburgh
St James's University Hospital, Leeds
St Mary's Hospital, London
St Richard's Hospital, Chichester
Stepping Hill Hospital, Stockport
Tameside General Hospital, Ashton-under-Lyne
University College Hospital, London
University Hospital of North Durham, Durham
University Hospital of North Staffordshire, Stoke on Trent
Yeovil Women's Hospital, Yeovil
Cumberland Infirmary, Carlisle
Homerton University Hospital, London
Princess Royal Hospital, Telford
Southport & Ormskirk Hospital NHS Trust, Ormskirk
The Hillingdon Hospitals NHS Foundation Trust, Uxbridge
Worthing Hospital, Worthing
Wythenshawe Hospital, Manchester
Leicester General Hospital, Leicester
Princess Royal University Hospital, Orpington
Royal London Hospital, London
Whipps Cross University Trust Hospital, London

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



Follow us

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New UKOSS studies coming soon!

Breast Cancer in Pregnancy

This study will identify the current incidence of primary breast cancer in pregnancy in the UK and investigate the presentation and management of breast cancer in pregnancy, looking at the short-term outcomes for both mother and infant.



Epilepsy in Pregnancy

This case-control study will identify the prevalence of poorly controlled epilepsy amongst pregnant women in the UK and investigate the management of women with poorly controlled epilepsy in pregnancy.

More information on these planned studies will be available soon!

A welcome to the newly appointed UKOSS Steering Committee Members

Following the advertisement for new Committee Members the Steering Committee were delighted to appoint the following Consultants to represent Obstetrics and Anaesthetics:

Dr Philip Moore

Originally from Somerset, Philip has worked at Birmingham Women's Hospital as a consultant obstetric anaesthetist for the last fourteen years, previous to that having been a research fellow there for the COMET study. Apart from obstetrics, his clinical interests include neuroanaesthesia, acute pain, resuscitation and healthcare IT. He has continued his involvement in research as co-applicant for the BUMPES, SALVO and ANODE NIHR trials. Philip is delighted to be representing his specialty on the UKOSS Steering Committee and hopes his contributions as an anaesthetist will be useful to this valuable national project.



Mr David Churchill

David has been a full time consultant obstetrician for 20 years. He works at Wolverhampton and has an honorary contract with the University of Birmingham. He researched ambulatory blood pressure monitoring in normal and hypertensive pregnancies for his MD and remains research active as the local PI for several trials. His areas of clinical interest are maternal and fetal medicine and his everyday practice involves caring for women with endocrine, hypertensive and renal diseases. In the past he has held senior positions in medical management and is currently the deputy head of the undergraduate academy at New Cross Hospital. He is an instructor on the MOET course and has taught life saving skills in Bangladesh and several countries in Sub-Saharan Africa. He is also a central assessor for the MBRRACE-UK confidential enquiries into maternal mortality.



Case report summary for current studies up until the end of May 2015

| Disorder | Actual number of reported cases | Data collection forms returned (%) | Number of confirmed cases (%) | Expected number of confirmed cases |
|--------------------------------|---------------------------------|------------------------------------|-------------------------------|------------------------------------|
| Amniotic Fluid Embolism | 210 | 203 (97) | 140 (69) | 123 |
| Anaphylaxis | 57 | 49 (86) | 32 (65) | 77 |
| Aspiration in Pregnancy | 8 | 7 (88) | 4 (57) | 25 |
| Cystic Fibrosis | 19 | 7 (37) | 7 (100) | 9 |
| Epidural, Haematoma or Abscess | 13 | 9 (69) | 7 (78) | 3 |
| Gastric Bypass in Pregnancy | 176 | 123 (70) | 72 (59) | 39 |
| Pulmonary Embolism | 41 | 14 (34) | 1 (7) | 25 |
| Vasa Praevia | 49 | 23 (47) | 12 (52) | 55 |

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*Search your app store for 'qrcode'



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We are aware that as part of your GMC revalidation or NMC Continual Professional Development, you are required to provide evidence of participation in national audit and research. If any UKOSS reporters would like to receive a certificate confirming their contribution to UKOSS, please email us at ukoss@npeu.ox.ac.uk and we will post one to you.



Melanie O'Connor, UKOSS Programme Manager, interviews Manisha Nair about her current role at the NPEU and her contribution to the UKOSS programme of work

What is your job title and what projects do you currently work on?

I am a senior epidemiologist/health services researcher for UKOSS and other research projects at the NPEU. Along with Marian Knight, I am working towards translating UKOSS to India in order to collect data and conduct epidemiological studies on risk factors for maternal morbidity and mortality.

Can you give me a brief overview of your career to date?

I received my medical degree in India in 2002, following which I worked as a Surveillance Medical Officer and State Routine Immunisation Officer in the polio eradication project of the World Health Organisation in India until 2008. After my daughter was born in 2007, I decided to change my career path from programmes to academia and thus went back to University. I completed my MSc in Global Health Science from University of Oxford in 2009 as a future faculty scholar of Public Health Foundation of India, undertook training in clinical research as a Fogarty Scholar of the National Institutes of Health in 2010 and then went on to complete my DPhil in Public Health at University of Oxford in 2013 as a Weidenfeld Scholar. I started working with the NPEU as an epidemiologist/ health services researcher in April 2013.

Please could you summarise your role in UKOSS/how you use UKOSS data?

My role in UKOSS is to conduct epidemiological and statistical analysis of the data. UKOSS maintains high quality standards in data collection and compilation which is matched by an equally rigorous data cleaning and robust analytical process to make the outputs useful for clinical and policy purposes. The projects that I have been involved with have compiled data collected through the UKOSS studies conducted since 2005 to answer questions about ethnic variations in maternal morbidity in the UK, estimate the rates of specific maternal risks associated with planned vaginal birth after caesarean (VBAC) and elective repeat caesarean section (ERCS) and to assess risk factors associated with direct maternal deaths in the UK by using information from the UKOSS and MBRRACE-UK databases.

What has been the biggest challenge you have encountered whilst working with UKOSS?

The biggest challenge is to ensure that the epidemiological and statistical methods used to analyse the data are robust and the process is rigorous every time, but I enjoy this very much because of the associated opportunity to sharpen my skills.

What do you enjoy most about working with UKOSS?

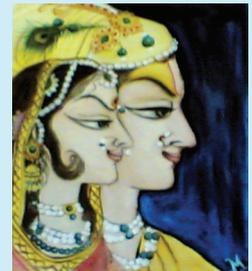
There are not many programmes like UKOSS and therefore, there are not many opportunities to work with data on rare conditions that affect maternal health. The variety of studies conducted through UKOSS over ten years give ample scope with good sample size to answer important research questions to inform policies in the UK and globally. These experiences are valuable for my career in maternal and perinatal research.

Is there a specific research topic area that you feel particularly strongly about?

I am working towards developing a computational model to estimate the range of effectiveness of interventions to reduce maternal mortality globally.

Lastly, what are your interests/hobbies outside of your working life?

Outside of my work life, my time is mostly spent with my family and trying some oil on canvas (whenever possible).



King and Queen from Rajput dynasty, Manisha Nair

Chocolate Box



Chocolates this month go to Frances Lamb at Royal Victoria Infirmary for her extra efforts to obtain outstanding information and to Karen Cutler from Poole Hospital for catching up with a backlog of outstanding data.

Many thanks to you both!

