Insights from outside BJOG
October 2017

Clinical guidelines updates

To be added at proof stage

New reports and guidelines

Managing complications in pregnancy and childbirth: A guide for midwives and doctors

Published by the World Health Organization (WHO), the second edition of this comprehensive guidance manual has been updated and revised in response to user feedback. The manual is aimed at health professionals in training and those providing emergency obstetric care. Because this manual is designed for use during obstetric emergencies the content is arranged by symptom rather than disease. For each main symptom a breakdown of presenting symptoms and other symptoms and signs are provided and a probable diagnosis is highlighted. Symptoms covered in section two include: shock; malpositions and malpresentations; labour with a scarred uterus; unsatisfactory progress of labour; prolapsed cord; loss of fetal movements; fever after childbirth; difficulty in breathing; shoulder dystocia; fetal distress in labour. Section one provides key clinical principles for managing complications that arise during pregnancy and childbirth such as rapid initial assessment, emotional and psychological support in obstetric and newborn emergencies, clinical use of blood, blood products and replacement fluids, anaesthesia and analgesia and operative care principles. Section three provides detailed instructions and diagrams for carrying out procedures such as spinal anaesthesia, paracervical block, pudendal block, breech birth, external version, culdocentesis and colpotomy, repair of ruptured uterus, postpartum hysterectomy, manual removal of placenta, episiotomy and correcting uterine inversion. The appendix provides guidance on essential medicines required for managing complications during pregnancy and childbirth.
http://apps.who.int/iris/bitstream/10665/255760/1/9789241565493-eng.pdf

U.S. Medical Eligibility Criteria for Contraceptive Use, 2016 (US MEC)

The US Centers for Disease Control and Prevention (CDC) have recently published online resources to support the implementation of the updated US Medical Eligibility Criteria (US MEC) for Contraceptive Use, 2016. The US MEC speaker-ready slide set with accompanying speaker notes has been written specifically to help health care providers to improve their knowledge of the 2016 eligibility criteria and to help health professionals to present the updated recommendations to colleagues. The slide set highlights the new recommendations, outlines any changes to the existing recommendations, and provides various scenarios to aid learning.

US MEC speaker-ready slide set – power point
https://www.cdc.gov/reproductivehealth/contraception/unintendedpregnancy/ppt/MEC_SlideSet_2016.pptx

US MEC speaker-ready slide set - pdf
https://www.cdc.gov/reproductivehealth/contraception/unintendedpregnancy/pdf/MEC_SlideSet_2016.pdf

A teen pregnancy prevention speaker-ready slide set based on the CDC contraceptive method guidance has also been developed. The slide set highlights the recommendations, the underlying evidence and provides clinical scenarios, short tests and succinct take home messages.

Teen pregnancy prevention speaker-ready slide set – power point
https://wwwdev.cdc.gov/reproductivehealth/contraception/unintendedpregnancy/ppt/Teen_Pregnancy_SlideSet_2016.pptx

Teen pregnancy prevention speaker-ready slide set - pdf
https://www.cdc.gov/reproductivehealth/contraception/unintendedpregnancy/pdf/Teen_Pregnancy_SlideSet_2016.pdf

Additional resources including MEC summary charts, contraceptive effectiveness charts and access to the US MEC & US SPR App are available from:
https://www.cdc.gov/reproductivehealth/contraception/mmwr/mec/summary.html

Maternal and neonatal immunization field guide for Latin America and the Caribbean
This comprehensive field guide, published by the Pan-American Health Organization (PAHO) and the World Health Organization Regional Office for the Americas, aims to help facilitate and strengthen the provision of maternal and neonatal immunisation programmes across the Americas by providing practical guidance to health professionals and programme managers regarding available vaccines, how to implement vaccine programmes and promote, expand and integrate maternal and neonatal vaccine services. Section one of the manual focuses on contextual issues such as the background and rationale for maternal and neonatal immunisation, vaccine safety and regulatory issues, maternal and neonatal immunisation information systems and social communication and vaccine acceptance. Section two discusses the maternal and neonatal vaccines currently in use including influenza, tetanus, pertussis and hepatitis B and provides guidance, safety and scheduling advice for administration during pregnancy. The annex enables access to a range of figures and tables providing data on: progress in maternal and neonatal immunization in the region of the Americas, 2010-2015; integration of maternal immunisation with other health services; upcoming vaccines currently in the development pipeline that are relevant to maternal and neonatal immunisation; vaccines reviewed by WHO's GACVS for use during pregnancy and relevant recommendations; regional maternal and neonatal immunization schedule; SWOT analysis of current maternal and neonatal immunisation practices in the region of the Americas.
http://iris.paho.org/xmlui/bitstream/handle/123456789/34150/9789275119501-eng.pdf?sequence=1&isAllowed=y

WHO toolkit for the care and support of people affected by complications associated with Zika virus
The World Health Organisation (WHO) has recently launched a new toolkit to aid the care and support of people affected by complications associated with Zika virus. The toolkit incorporates numerous guidelines developed by the WHO in recent months regarding Zika virus and aims to help countries to prepare for Zika virus outbreaks. The toolkit consists of three comprehensive manuals which are each divided into a series of modules: manual for health care professionals (Module 1 - management of children born in Zika virus-affected areas, Module 2 - assessment and management of

people with Guillain Barré syndrome and other neurological complications triggered by Zika virus, Module 3 - mental health and psychosocial support for people affected by complications of Zika virus); manual for public health planners and managers (Module 1 - essential information on complications associated with Zika virus, Module 2 - strengthening the long-term response to Zika virus); manual for community workers (Module 1 - providing care and support for children in a Zika virus affected area, Module 2 - psychosocial support for caregivers and families of children with or at risk of congenital Zika virus syndrome, Module 3 - rehabilitation and psychosocial support for people affected by Guillian Barré syndrome triggered by Zika virus). Learning objectives are outlined and key messages, practical tips, items for measuring progress and links to relevant resources are also provided.
http://apps.who.int/iris/bitstream/10665/255718/1/9789241512718-eng.pdf?ua=1

Innovations and patents

Patent applications

US2017189065 (A1) Functional uterine manipulator. Einarsson, J. 6 July 2017.
This patent application outlines the design of a uterine manipulator which is inserted into the uterus and used to stabilise and reposition the uterus and also to detach the uterus and cervix from the vagina during hysterectomy.
This application is a continuation of U.S. application Ser. No. 14/463,798, filed Aug. 20, 2014, which is a continuation-in-part of U.S. application Ser. No. 14/375,200, filed Jul. 29, 2014, which is the National Stage of International Application No. PCT/US2012/065584, filed Nov. 16, 2012, which claims the benefit of U.S. Provisional Application No. 61/592,125, filed Jan. 30, 2012, the disclosures of which are hereby incorporated by reference in their entirety for all purposes.
https://worldwide.espacenet.com/publicationDetails/biblio?CC=US&NR=2017189065A1&KC=A1&FT=D&ND=3&date=20170706&DB=EPODOC&locale=en_EP#

US2017184610 (A1) Methods and compositions for diagnosis of ectopic pregnancy. Speicher DW., Barnhart KT., Beer LA. 29 June 2017.
This patent application relates to the development of a reagent kit used in the diagnosis of ectopic pregnancy. Specifically, the patent outlines the identification, in biological fluid obtained from a woman, of changes in the expression of particular genes or of expression levels in proteins or peptide fragments that, when compared to reference values, indicate the existence of an ectopic pregnancy.
This application is a divisional of U.S. patent application Ser. No. 13/397,442, filed Feb. 15, 2012, which claims the benefit of the priority of US Provisional Patent Application No. 61/443,026, filed Feb. 15, 2011, which applications are incorporated herein by reference.
https://worldwide.espacenet.com/publicationDetails/biblio?CC=US&NR=2017184610A1&KC=A1&FT=D&ND=3&date=20170629&DB=EPODOC&locale=en_EP#

AU2015342341 (A1) A class of new type growth hormone releasing hormone-like peptide and use thereof in the preparation of a drug for treating infertility. Tang S., Zhang J., Zhang X., Zhou D., Tang J.29 June 2017.
This patent application discusses the use of four growth hormone-releasing hormone homodimers in the treatment of infertility. The authors state that during research use

of the amino acid sequence of dimeric peptide 2F for treating female infertility resulted in higher birth and pregnancy rates.
https://worldwide.espacenet.com/publicationDetails/biblio?CC=AU&NR=2015342341A1&KC=A1&FT=D&ND=3&date=20170629&DB=EPODOC&locale=en_EP#

US2017182137 (A1) Breast and ovarian cancer vaccines. Disis ML., Cecil D., Slota M. 29 June 2017.
This patent application outlines the use of an epitope of a peptide that when administered to a woman elicits an immune response and which could therefore potentially act as a vaccine for breast and ovarian cancer.
This application claims the benefit of U.S. provisional patent application No. 61/972,176, filed Mar. 28, 2014, which is herein incorporated by reference in its entirety.
https://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=12&ND=3&adjacent=true&locale=en_EP&FT=D&date=20170629&CC=US&NR=2017182137A1&KC=A1

Legal matters

China sides with Berkeley on CRISPR patent
The Chinese State Intellectual Property Office (SIPO) has recently granted a patent for CRISPR/Cas9 genome editing technology to the University of California, Berkeley, thus allowing the license of CRISPR technologies to companies and researchers within China. Currently, the intellectual property rights to CRISPR are in dispute in the United States.
http://www.bionews.org.uk/page.asp?obj_id=856844&PPID=857301&sid=682

Time to get serious about child marriage in Latin America
The government in Honduras has recently unanimously passed a bill to abolish the practice of child marriage. The new law states that children under the age of 18 must not marry under any circumstances, including marriage under the age of 18 even with the permission of both sets of parents.
https://www.hrw.org/news/2017/07/13/time-get-serious-about-child-marriage-latin-america

Clinical trials

Clinicians keen to keep up-to-date regarding clinical studies that are currently recruiting may find the following informative.

Title Causes of fetal death: comparison of diagnostic accuracy between extensive and selective protocol testing (EMIBICI)

Registration	https://clinicaltrials.gov/ct2/show/NCT03214328
Description	This observational study aims to compare the use of extensive protocol testing with selective protocol testing for determining causes of intrauterine fetal death.

Outcome measures	**Primary:** concordance of the causes of fetal death between selective and systematic protocol testing.	**Secondary:** Not specified.	
Study site	Rouen, France.	**Anticipated study end date**	January 2021.

Title Effects of PGS2.0 in patients with unexplained RPL

Registration	https://clinicaltrials.gov/ct2/show/NCT03214185		
Description	This multi-centre randomised controlled trial aims to investigate the effect of preimplantation genetic screening on the clinical outcomes of assisted reproductive treatment in women with recurrent pregnancy loss. The investigators intend to use the trial data to build a predictive model for the outcomes of preimplantation genetic screening in women experiencing recurrent pregnancy loss.		
Outcome measures	**Primary:** ongoing pregnancy.	**Secondary:** embryo implantation; clinical pregnancy; time to pregnancy; pregnancy outcome.	
Study site	Shanghai, China.	**Anticipated study end date**	September 2020.

Title Intraperitoneal delivery of adaptive natural killer (NK) cells (FATE-NK100) with intraperitoneal interleukin-2

Registration	https://clinicaltrials.gov/ct2/show/NCT03213964		
Description	This phase 1 study aims to determine the maximum tolerated dose/maximum feasible dose (MTD/MFD) of a single infusion of FATE-NK100 with interleukin-2 administered via an intra-peritoneal catheter in women with recurrent ovarian, fallopian tube or primary peritoneal cancer.		
Outcome measures	**Primary:** maximum tolerated dose of FATE-NK100.	**Secondary:** objective response rate; progression-free survival; overall survival (OS).	
Study site	Minnesota, US.	**Anticipated study end date**	April 2020.

Title Esomeprazole in treatment of early onset preeclampsia

Registration	https://clinicaltrials.gov/ct2/show/NCT03213639		
Description	This double-blind randomised controlled trial aims to investigate the effectiveness of esomeprazole (40mg once per day) for the treatment of early onset pre-eclampsia.		
Outcome measures	**Primary:** number of women who develop HELLP syndrome.	**Secondary:** not specified.	
Study site	Assiut, Egypt.	**Anticipated study end date**	April 2019.

Title Treatment of gardnerella vaginalis vaginal colonization with amoxicillin

Registration	https://clinicaltrials.gov/ct2/show/NCT03211156		
Description	This randomised, double-blind, placebo-controlled pilot study aims to investigate whether, in women who are infected with gardnerella vaginalis but have no clinical evidence of bacterial vaginosis, amoxicillin can eradicate the gardnerella vaginalis infection.		
Outcome measures	**Primary:** the proportion of participants with eradication of GV in each study arm at visit two as assessed by NAAT.	**Secondary:** the proportion of participants reporting related adverse events (AEs and SAEs) in each study arm following the first dose of study product through visit two.	
Study site	Various, US.	**Anticipated study end date**	June 2018.

Shona Kirtley, Senior Research Information Specialist, Centre for Statistics in Medicine, Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford, Botnar Research Centre, Oxford, UK.