

BAPM annual conference: excellence in perinatal practice

The Studio, Birmingham, 21-22 September 2017



The British Association of Perinatal Medicine's (BAPM) annual scientific meeting took place in September, welcoming a packed audience of professionals from medical, nursing and allied health backgrounds. Now a permanent fixture and a must-attend conference for the neonatal community, the programme included lively debates, workshops and presentations from internationally renowned speakers.

Preceding the conference, the annual general meeting concluded with the Peter Dunn prize for outstanding trainee contribution to BAPM, awarded to Dr Vix Monnelly for her work in developing the BAPM Research Skills Training Days. Then followed the inauguration of Dr Gopi Menon as BAPM President, taking over from Dr Alan Fenton who served on the BAPM Executive for 14 years.

The conference started with Professor Terence Stephenson, chair of the General Medical Council (GMC), outlining the GMC's work in improving patient safety. He explained the council's roles in education, registration, revalidation, fitness to practise and standards. The audience heard about initiatives to support doctors including 'upstreaming' (promoting good practice to reduce risk rather than just dealing with claims of negligence) and collaborative law (sharing data and intelligence between regulating bodies).

Dr Sam Oddie presented on the **National Neonatal Audit Programme (NNAP): where is it up to, where is it going?** and launched the *NNAP Annual Report*. He described data on 2016 births and started by discussing whether audit works, how it is best delivered and the importance of feedback. The best way to encourage improvement based on national audit is to target specific recommended actions at the right audience, addressing barriers that exist. New measures in 2017 include appropriateness of place of birth for babies less than 27 weeks' gestation, the presence of parents on ward rounds and reducing inappropriate separation of term infants



The BAPM Conference – a must-attend event for the neonatal community.

from their mothers. In 2018, the plan includes looking at nurse staffing.

Newly elected BAPM President Dr Menon gave a presentation on **The future of quality improvement in UK neonatology**. Dr Menon described how we have come a long way in neonatal care with reduction in mortality rates, the building of networks, improvement in data collection and analysis, and better professional cohesion. However, there is still variation in the quality of care in areas such as the location of delivery of preterm infants and their early thermal care. National quality improvement will require professional collaboration to enable sharing of knowledge and values, and the joint working of the relevant professional and government agencies.

Professor Dominic Wilkinson gave an interactive lecture on **Difficult decision-making in perinatal care – the role of the ethics team**, with the audience taking part in polls relating to example scenarios using their smartphone or laptop. This illustrated a relatively restricted knowledge about, and use of, ethics teams in the UK. Professor Wilkinson pointed out the importance of separating difficult ethical decision-making

and mediation when there is disagreement between professionals and parents.

Dr Chris Gale spoke about **Big data and point of care trials**. He described the landscape of neonatal data in the UK and made the case for a new approach to clinical trials using data routinely collected for clinical purposes. As an example he used the planned WHEAT trial (Withholding Enteral feeds Around packed red cell Transfusion to prevent necrotising enterocolitis in preterm neonates). WHEAT uses information that is routinely collected by staff as part of day-to-day care, which makes for a simple and easy way to carry out a clinical trial. More consistent use of this approach has the potential to speed the growth of evidence-based care.

To close day one of the conference, it was an honour to welcome Dr Shoo Lee from Toronto, Canada. Dr Lee gave the 2017 Founders' Lecture on the topic of **Quality in neonatal care**. He outlined the concept of evidence-based practice for improving quality (EPIQ) with reference to comparative effectiveness research in Canada. In conclusion, Dr Lee said the lessons from EPIQ revealed that quality improvement is everyone's business. More importantly,

organisation and leadership are key drivers, with motivation from the ground up based on trust and openness, with feedback and evaluation being essential to sustainability.

To start the second day, Professor David Dunger discussed the physiology and developmental roles of **insulin-like growth factors (IGF) and IGF-binding proteins (IGFBP), and their role in preterm infants** from molecular science to clinical practice. He highlighted the importance of IGF1 and IGFBP3 in prenatal and postnatal growth, and the consequences of low IGF1 in preterm infants. Babies with the lowest IGF1 levels have the lowest head circumferences, and higher risk of bronchopulmonary dysplasia (BPD) and retinopathy of prematurity (ROP). He shared the initial results of an open label study of recombinant human IGF1/IGFBP3 in 46 infants, which showed no significant effect on severity of ROP but a 53% reduction in severe BPD and a 44-64% reduction in intraventricular haemorrhage.

Professor Eugene Dempsey discussed **low blood pressure in preterm infants**. He talked about various approaches to defining hypotension in preterm infants and the use of other measures of tissue perfusion including perfusion index and echocardiographic measurement of cardiac output. He highlighted the huge variation in rates of vasopressor use in preterm babies. He stressed the poor relationship between blood pressure and cardiac output and lack of association between low mean blood pressure and later developmental scores. He outlined an approach to transitional hypotension based on recent trials, emphasising the goal of maintaining effective tissue perfusion and the need for assessing efficacy of haemodynamic intervention on a continuous basis using a combination of clinical, biochemical and haemodynamic parameters.

Professor Jane Norman delivered the annual Peter Dunn Lecture **Can we prevent preterm delivery?** She outlined the global burden of preterm delivery and pointed out that to prevent it on a global scale we need to focus on smoking cessation, maternal health and using single embryo transfer in *in vitro* fertilisation. She suggested that a slightly different question is also considered – how can we improve outcomes for preterm babies? The solutions are varied and include managing intrauterine infection and considering delivery rather than prolonging gestation. Progesterone will have limited utility; secondary out-



Dr Shoo Lee presenting the Founders' Lecture.



Winner of the free paper Dr James Webbe.

comes of the OPPTIMUM trial (progesterone prophylaxis to prevent preterm labour) showed significant increase in respiratory, gastrointestinal, renal and hearing morbidity. A greater understanding of genetic factors involved in preterm delivery is needed, and treatments to prevent pre-eclampsia such as aspirin and simvastatin. There is a need for ensuring long-term follow-up to fully understand the risk-to-benefit ratio of interventions.

There was a lively debate between Professor Neena Modi and Dr Nicholas

Embleton on the topic **Should preterm babies be made to grow like fetuses?** Both speakers eloquently discussed the pros and cons of faster versus slower weight gain, the importance of appropriate composition of nutrition and of paying adequate attention to monitoring growth. The long-term effects of preterm nutrition were discussed, acknowledging the limitations of our current knowledge about cause and effect. The sensitivity of the preterm brain to under-nutrition, on the one hand, and the potential for rapid growth to set the scene for later metabolic disease, have to be balanced. Professor Modi challenged the audience to consider developing research to answer important questions in this area.

The final presentation of the meeting from Dr Andrew Morris, entitled **Inherited metabolic disease in the newborn**, was a dynamic session, giving a useful approach to a subject that can be very challenging. Highlights included excellent practical advice on the time-critical emergency management of hyperammonaemia to optimise outcome, and a signpost to guidelines on the website of the British Inherited Metabolic Diseases Group (www.bimdg.org.uk).

Six free papers were presented and the prize for the best free paper was awarded to Dr James Webbe for his paper **Beyond survival: what outcomes are important for different groups?** Thirty posters were presented on a variety of topics during the conference. Dr Sarah Bates and Dr Rowena Craig received the prize for their presentation on **Perinatal teamwork: multidisciplinary champions as a strategy to optimise neonatal care for preterm babies**. The interactive workshops on difficult airway management, parenteral nutrition and the NNAP Reports were extremely popular.

This year's conference was over-subscribed with a reserve list; next year's conference will be held in Leeds on 27-28 September 2018.

By Dr Sarah Bates, BAPM Deputy Representative for LNU/SCBU

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