Neonatal paediatrics

with Dr Jill Maron

Talking *points*

Knowledge & comprehension

1. Why is caring for premature babies so complicated?
2. What are the advantages and challenges of using saliva as a diagnostic test in neonatal paediatrics?
3. What are some of the different causes of feeding problems in premature infants? How has Jill's work helped us understand these issues?
4. What have Jill and her team discovered about the links between exposure to opioids and excessive eating in newborn infants?

Application

5. What questions would you ask Jill to find out more about her research methods?
6. What do you think clinicians need to consider when communicating with the families of the infants in their care?

Evaluation

7. Jill works as both a clinician, dealing directly with patients, and as a scientist, conducting research. What do you think you would find most rewarding about this? What challenges would there be? Would you prefer to work as a clinician, a researcher or both, like Jill?
8. Jill talks about the importance of multidisciplinary work in neonatal paediatrics. Why do you think working with colleagues from different fields is valuable, and what do you think the challenges could be? How good are you at working with others?

Activity

In pairs, create an informative and engaging ten-minute podcast episode, aimed at your fellow students, about the use of salivary diagnostics in neonatal paediatrics. Use Jill's article as well as your own research to find the necessary information.

One of you should research common health issues in newborn infants, particularly premature infants. The other should research the functions and purpose of saliva, and what salivary diagnostics can tell us.

Once you have collected all the information, discuss how you would like to present your podcast. Will you write a script, taking it in turns to present different pieces of information? Will you interview each other to make the podcast more conversational? How will you make your podcast interesting and engaging, while remaining sensitive to the seriousness of the issues being discussed?

Topics you might want to cover during the podcast could include:
- Definitions of neonatal, paediatrics, newborn and premature
- Your research about common health issues in newborn infants
- The unique challenges of working with newborn infants, particularly those born prematurely
- The different ways clinicians can monitor the health of premature infants and diagnose any issues, including the use of saliva in diagnostics
- Your research about saliva, its function and what it can tell us
- How salivary diagnostics can help us understand the feeding habits of infants
- What has been learnt about feeding problems in babies who were exposed to drugs used by the mother during pregnancy.

Share your podcast episode with your fellow students, either by performing it live, or by recording it and playing it to them. Then, listen to your classmates' podcasts. What was similar and different about your approaches? How well did each podcast convey the science? How engaging was each podcast? What have you learnt about what it means to be an effective science communicator?

More *resources*

- Watch Jill's TED talk, in which she gives more detail about her work: **www.youtube.com/watch?v=04zCKzzT6YA&t=345s**
- The podcast *Neonatal Conversations* includes lots of interviews with professionals in the field: **www.neonatalconversations.com**
- This Futurum article covers another area of neonatal paediatrics, paediatric surgery: **futurumcareers.com/lighting-up-cancer-innovation-in-paediatric-surgery**