

introduction of a standardised hyperglycaemia guideline³ which resulted in babies not receiving restricted glucose amounts in their PN by day 5 (16g/kg/day compared to an average of 9g/kg/day previously). More than 90% of babies in this cohort remained on standardised PN, compared to 15% when first introduced.

Conclusion Following the introduction of standard additions of sodium glycerophosphate and the slower titration regimen for babies weighing less than 1.5kg, most babies were now tolerating standardised PN and it was deemed a suitable regimen for this cohort. NICE recommended nutritional support¹ was reached by day 5 of PN. The introduction of a hyperglycaemia management guideline also standardised the use of insulin in this cohort, resulting in glucose reduction in PN being required less frequently.

REFERENCE

1. National Institute of Health and Care Excellence. Neonatal Parenteral Nutrition: NICE Guideline [NG154], 2020. Available at: <https://www.nice.org.uk/guidance/ng154>
2. Beaney AM. Quality assurance of aseptic preparation services: standards part A. Fifth Edition. 2016. Available at: <https://www.rpharms.com/Portals/0/RPS%20document%20library/Open%20access/Professional%20standards/Quality%20Assurance%20of%20Aseptic%20Preparation%20Services%20%28QAAPS%29/rps-qaaps-standards-document.pdf>
3. Management of Hyperglycaemia in the Neonate. 2020. Local Trust guideline – reference available upon request.

P22

UNLICENSED MEDICINES USE IN NEONATES: DO WE KNOW WHAT WE'RE GIVING?

Thomas Wyllie*, Jessica Girvin. *Cardiff and Vale University Health Board*

10.1136/archdischild-2022-NPPG.30

Background The use of unlicensed and off-label medicines is common within neonatal intensive care.¹ Their use presents challenges, including inconsistent supply, high cost and lack of information together with increased risk of medication errors and adverse drug reactions.¹⁻² Despite these significant drawbacks, the dearth of products licensed for the neonatal population necessitates the routine use of these medicines.³⁻⁴

'Unlicensed' describes medicines that do not have a marketing authorisation, whereas an off-label medicine is a licensed product used outside of the terms of its licensing, i.e., for a different age, dose or route.²

Aim Determine health care professional's (HCP's) knowledge of the license status of medicines in common use on a tertiary neonatal unit. Explore how confident they are in using unlicensed and off label medicines.

Method A survey was developed to examine the views of HCPs regarding unlicensed medicines and their knowledge of the licensing status of medicines used routinely in their practice. Doctors, nurses and advanced neonatal nurse practitioners (ANNPs) working on a tertiary neonatal unit were invited to complete the survey.

The survey asked whether HCPs felt they understood what unlicensed medicines were and whether they thought they knew the license status of the medicines they prescribe/administer. A second section was a list of 20 commonly used drugs and HCPs were asked to specify for each if it was a licensed, unlicensed or off-label use.

Results All HCP respondents (n=28) answered that they understood the concept of unlicensed medicines (partially or fully) and that they were confident in using them (89% reported confidence ≥ 3 out of 5).

Tested on their knowledge of the license status of specific medicines, the average number of medicines that each respondent correctly identified was 8.9 out of 20 (range 5-13, median 9). Prescribers who scored themselves higher on the question 'Do you know the license status of the medicines you prescribe?' knew the license status of more medicines when tested (correlation coefficient = 0.775, $p=0.0002$). This correlation was not observed for nurses and there was no correlation with number of years of experience within neonatology.

Only a minority of prescribers (three) said they would look up the license status of a medicine before prescribing. When asked what resource they would use to find out the license status, most respondents said British National Formulary for Children.

Conclusion HCPs working on a tertiary neonatal unit reported that they understood the concept of unlicensed and off-label medicines and felt confident in prescribing and administering them. However, there is a lack of awareness of the licensing status of drugs in common use. Prescribers had good insight into the gap in their knowledge but did not seek out information on medication license status before prescribing.

The routine use of medicines outside their product licenses may have created a culture where there is felt to be no need to be aware of the status of a specific medicine. Further research is warranted into how to best communicate the license status of medicines to HCPs.

REFERENCES

1. Conroy S, McIntyre J, Choonara I. Unlicensed and off label drug use in neonates. *Arch Dis Child Fetal Neonatal Ed* 1999 Mar 1;**80**:F142-145.
2. Rawlence E, Lowey A, Tomlin S, Auyeung V. Is the provision of paediatric oral liquid unlicensed medicines safe? *Arch Dis Child Educ Pract Ed* 2018;**103**:310-313.
3. Kieran EA, O'Callaghan N, O'Donnell CP. Unlicensed and off-label drug use in an Irish neonatal intensive care unit: a prospective cohort study. *Acta Paediatrica* 2014;**103**:e139-142.
4. Costa HT, Costa TX, Martins RR, Oliveira AG. Use of off-label and unlicensed medicines in neonatal intensive care. *PLoS one* 2018 Sep 25;**13**:e0204427.

P23

OFF-LABEL USE OF INTERLEUKIN-6 INHIBITORS IN PAEDIATRICS: A SYSTEMATIC REVIEW

¹Hafsah Badshah*, ²Mandy Wan, ¹Asia N Rashed. ¹*Institute of Pharmaceutical Science, King's College London*; ²*Evelina London Children's Hospital, Guy's and St Thomas' NHS Foundation Trust*

10.1136/archdischild-2022-NPPG.31

Aim Elevated Interleukin-6 (IL-6) is associated with the pathogenesis of various chronic inflammation and autoimmune conditions.¹ Currently, only three IL-6 inhibitors, tocilizumab, siltuximab and sarilumab, are approved for a limited number of conditions in adults, and only tocilizumab is licensed in children.² However, off-label use of these drugs has been reported in paediatrics. This review aimed to summarise the evidence base for the off-label use of these three IL-6 inhibitors in children, the indications for off-label use, and the doses prescribed. The nature of adverse events associated with the off-label use of these drugs and the clinical effectiveness were also identified.

Method A systematic search was conducted on EMBASE, Medline, and PubMed; studies published in the English language between 2009-2020, reporting the off-label use of tocilizumab, siltuximab and sarilumab in children aged 18 years or under were included. Data screening and extraction were