EVALUATION OF THE KAISER PERMANENTE RISK BARRIERS TO ACHIEVING QUALITY NEONATAL CARE IN AT 34 WEEKS’ GESTATION RECEIVING EMPIRICAL ANTIBIOTICS FOR SUSPECTED EONS AS PER CG149. ONE BABY HAD A POSITIVE BLOOD CULTURE AND ONE HAD A POSITIVE CSF CULTURE. OF THESE 94 BABIES, ONLY 19 (20.2%) WOULD HAVE BEEN COMMENCED ON EMPIRICAL ANTIBIOTICS BY THE KPRC. THOSE 19 BABIES WERE MORE LIKELY TO HAVE A CRP >20mg/L (P<0.05) AND NEED A LONGER COURSE OF ANTIBIOTICS (P<0.05). INTERESTINGLY, 27 OUT OF THE 94 BABIES (28.7%) WERE CLASSED AS SIGNIFICANTLY UNWELL (AS DEFINED ABOVE) AND OF THESE, ONLY 15 (55.6%) WOULD HAVE BEEN IDENTIFIED BY THE KPRC AS NEEDING ANTIBIOTICS. 6 BABIES WITH A CRP >50 WERE NOT IDENTIFIED FOR ANTIBIOTICS BY THE KPRC, INCLUDING A BABY WITH A CRP OF 155.

Conclusions Application of the KPRC to this cohort would have significantly reduced antibiotic administration rates. The safety and appropriateness of the KPRC for our population needs further assessment though, as some babies with significant evidence of infection went undetected by the calculator. In particular, the role of the KPRC in identifying clinically well babies with a very high CRP needs further consideration.

Quality Improvement and Patient Safety

BARRIERS TO ACHIEVING QUALITY NEONATAL CARE IN LOW RESOURCE SETTINGS: PERSPECTIVES FROM A UNIQUE PANEL OF NEONATAL HEALTH EXPERTS

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Background In 2019 there were 2.4 million newborn deaths worldwide, accounting for nearly half of all child deaths under 5 years of age. Despite increasing rates of facility based deliveries, neonatal mortality rates remain persistently high in low resource settings (LRS). This has catalysed international focus on understanding and enabling quality newborn care in order to achieve global targets to end preventable newborn deaths by 2030. Digital interventions are a promising tool that may accelerate progress towards achieving quality improvement goals.

The WHO quality improvement standards for maternal and newborn care provide a blueprint for Quality of Care (QoC). Yet in many LRS, this agenda has yet to be operationalised and refined at the national and facility level to respond to country-driven priorities. We carried out a qualitative study to understand persistent barriers to QoC, and to identify quality improvement priorities from the perspective of a unique panel of neonatal experts with first-hand experience of delivering inpatient newborn care in LRS. We also sought expert views on the role of digital health as a vehicle to improve QoC.

Objectives The study aim was to identify barriers to quality inpatient neonatal care in LRS from the perspective of experts experienced in delivering and overseeing frontline neonatal care in these contexts.

Methods This study was part of a larger DELPHI study, carried out in 2018 to refine clinical diagnostic algorithms for the NeoTree platform. The Neotree is a digital quality improvement system combining immediate data capture, education and clinical diagnostic and management support. Physicians and nurse practitioners from high income and low income countries with clinical and research expertise in neonatal health were invited to participate. Additional inclusion criteria included
having over ten years of neonatal experience (at least three years in LRS), neonatal postgraduate training, fluency in English and internet access. We conducted 13 semi-structured interviews via Skype. All interviews were recorded and transcribed verbatim. Transcripts were analysed using a thematic content analysis. Ethical approvals were not required.

Results Twenty-two experts were invited to participate, of whom 16 responded and 13 agreed to take part (5 neonatologists, 6 paediatricians and two advanced nurse practitioners). Participants had a mean of 13 (±7 SD) years working in LRS. Lack of physical resources including equipment, funding, infrastructure; combined with limited human resources, education and specialist neonatal training were cited as key barriers to QoC. In addition, poor leadership at the community, local and national level hindered progress and left experts feeling excluded from defining QoC priorities. Poor communication within clinical teams, limited documentation and lack of standardised and locally appropriate guidelines were also identified as challenges.

Digital technologies, such as the NeoTree, were perceived to have potential for data capture and enabling standardised care. However, some highlighted that unreliable internet access may hinder implementation.

Conclusions Digital technologies may alleviate some barriers to QoC. However, systemic change involving local actors and policymakers is required to address entrenched QoC challenges and accelerate progress towards achieving global neonatal survival goals.

British Association of Child and Adolescent Public Health

1643 EXPLORING THE EXPERIENCE OF ADOLESCENTS IN A PAEDIATRIC EMERGENCY DEPARTMENT – TOO OLD OR TOO YOUNG?

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Background In paediatric emergency medicine (PEM), the age of transition from paediatric to adult emergency care is variable across countries. The UK has no agreed national standard on ED age limits and this arbitrary upper age limit is often set locally by commissioning groups reflecting service capacity and the population in which it serves. In Northern Ireland, adolescents often fall into the adult domain, with the regional paediatric emergency department (PED) catering for children up to fourteen years of age.

However, in response to Covid-19 surge planning, the PED age limit increased to age sixteen. This decision marked significant progress in the regional strategy to shift paediatric services to ‘a target transition stage of sixteen’ as well as coinciding with the NHS Long Term Plan to move towards 0–25 service models. Our retrospective survey aims to explore the experience of young people in the PED during this time and their preferred setting to receive care.

Objectives To determine the satisfaction reported by adolescents when visiting a PED and elicit the acceptability of both paediatric and adult services in this age group.

Methods A prospective 10-point survey was developed to assess adolescents’ overall satisfaction with their PED experience as well as their views on the waiting room setting, clinical treatment areas and staff. Data was collected over an eight-week period from adolescents aged fourteen and fifteen attending PED. The survey was administered at point of discharge or admission to hospital and completed anonymously. A 5-point likert scale was used to gauge the experience of adolescents with the addition of a free text response to allow for further comments on patient experience.

Results Fifty-three patients completed the survey with 99% rating their overall experience as good or better. The majority of participants were not known to paediatric services (85%). 43% of respondents had attended an ED in the previous twelve months of which eleven had previously attended an adult ED. Over half of these patients (55%) preferred the paediatric setting. Conversely, 70% of those who previously attended a PED wished to continue to be seen in this setting. Common themes included reduced fear and anxiety in PED, as well as the perception that paediatric staff have a better understanding of needs. Additionally, adolescents with specific needs expressed a lack of readiness to attend adult services with concerns surrounding lack of familiarity and challenging sensory environments.

Conclusions The majority of adolescents surveyed showed preference for the PED with environment and communication approaches identified as influencing factors. Our study highlights the importance of considering the needs of the adolescent as distinct from those of young children and adults. Wherever emergency care services are delivered to young people, providers should strive to provide an ‘adolescent friendly’ environment to meet physical, emotional and psychological needs. Clinical need, service capacity and individual choice should be considered in future decision-making tools to determine the setting in which emergency care is delivered.