A COMPARISON OF PAEDIATRIC NURSING EXPERIENCE CARING FOR ADULT COVID-19 PATIENTS BETWEEN THE TWO SURGES

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Background COVID-19 arrived in the UK and quickly gained pace in March 2020, threatening to overwhelm adult intensive care and thus hospitals across the country developed strategies to cope. Locally the adult and paediatric intensive care teams developed the novel idea of managing critically ill adult COVID-19 patients in the Paediatric Intensive Care Unit (PICU), with PICU caring for adult patients in March 2020 and again in January 2021.

Objectives We sent an online survey to all the paediatric intensive care nursing team following both surges in order to understand their views on the protracted experience.

Methods An anonymous online survey was sent out via a survey monkey link to all the paediatric intensive care nurses in our unit following both surge episodes.

Results 32 nurses completed the first survey and 12 completed the second. Prior to caring for adults 26/32 (81%) felt not so confident or not at all confident looking after adult COVID-19 patients. Following the first experience 29/32 (91%) nurses felt somewhat confident, very confident or extremely confident at looking after adult COVID-19 patients. 18/32 (56%) nurses found spending time on the adult COVID unit helpful. The majority (97%) preferred to work within their own unit rather than the adult ITU. 23/32 (72%) patients would be happy to care for adults again.

Prior to the second re-purposing of the PICU 6/12 (50%) felt positive/very positive looking after adult patients again, 100% of nurses felt the first experience had increased their confidence in looking adult patients and following the second surge 12/12 (100%) felt somewhat confident, very confident or extremely confident at looking after adult COVID-19 patients. Following the experience 10/12 (83%) would be happy to care for adult patients again.

Conclusions Prior to caring for adult COVID-19 patients in intensive care our paediatric intensive care nurses were anxious and had limited confidence. The majority of nurses however found the experience useful and gained confidence. Working within the familiarity of their own unit and team improved the experience. This confidence and experience appeared to be retained into the second surge and was shown by the overall positive response and willingness to look after adult patients in future.

British Association of Child and Adolescent Public Health

CHILD MORTALITY IN THE PANDEMIC

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Background This presentation draws on the findings of a national population-based study which collates real-time data on the deaths of children aged 0–17 years in England. More specifically, all child deaths are entered onto a national database within 48 hours of occurring. Additional detailed information on the circumstances of the children’s lives and deaths is subsequently added to support learning that could reduce the number of deaths in future. As the first database of this kind and by linking with national virology results, it was uniquely placed to investigate the effects of SARS-CoV-2, and the national lockdown used to control the virus, on child mortality.

Objectives There is an urgent need to understand the nature and effect of SARS-CoV-2 and measures to control it on illness and mortality in children. This work aims to investigate and quantify the characteristics of children dying with COVID-19 and to investigate patterns of causes or rate of childhood mortality during the pandemic lockdown periods.

Methods We compared the characteristics of the children who died in 2020, split by SARS-CoV-2 status. A negative binomial regression model was used to compare mortality rates in lockdown (23 March–28 June), with children who died in the preceding period (6 January–22 March), as well with those who died during a comparable period in 2019.

Results There is no evidence of excess mortality among children during the period of lockdown; nor substantial changes in any other causes of death during the same period. Children who died and had a positive result for SARS-CoV-2 were requiring more images, average total radiation dose per patient did not increase.

Areas for further improvement related to timings of follow-up imaging, neuroimaging, and parental information. For children with an abnormal CT head, one-third didn’t have a follow-up MRI head within the recommended 2–5 days and only 50% of follow-up skeletal surveys occurred within 2 weeks. Written consent from parents was obtained in 67% of cases but most were not given an information leaflet.

Conclusions Updates in local and national guidance led to more consistency in the investigation of suspected physical abuse. Ongoing interventions include weekly multi-disciplinary meetings between paediatric and radiology teams where relevant radiological investigations are reviewed jointly. In March 2020, a specific consent form and parent information leaflet was introduced with further education sessions to ensure these are used as part of standard practice. A new ‘Child Protection Checklist’ is also being introduced later this year to further streamline the pathway. We need consistency to provide optimal care for this vulnerable group of children, to ensure they are appropriately safeguarded.
more commonly older, and from ethnic minority groups. However, the age and ethnic profile of all-cause child mortality during lockdown appeared similar to deaths pre-lockdown and in 2019. We also found little evidence of over-representation of children with underlying health conditions among children who died with the virus. More specifically, we noted:

- 1550 child deaths were notified between 23 March and 28 June 2020; 437 of which were linked to SARS-CoV-2 virology records.
- 25 (5.7%) had a positive Polymerase Chain Reaction (PCR) result. PCR positive children were less likely to be white (37.5% vs 69.4%) and were older (12.2 vs 0.7 years) compared to child deaths without evidence of the virus.

Conclusions For the period studied, it is reassuring to note that there is no evidence of excess mortality of children from SARS-CoV-2. Furthermore, the apparent higher frequency of SARS-CoV-2 positive tests among children from Black, Asian and minority ethnic groups is consistent with findings in adults. However, ongoing surveillance is essential as the pandemic continues.

Quality Improvement and Patient Safety

1669 THE EVOLUTION OF THE QUALITY IMPROVEMENT FORUM
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Background Competence in Quality Improvement (QI) is an important skill for healthcare staff. It is part of the postgraduate curriculum and developing knowledge and skills in quality improvement empowers staff to change the systems in which they work, improve patient care and develop leadership skills.

Methods The QI forum is junior doctor led and is supported by a paediatric consultant and the health board QI team.

After initially starting as a ‘junior doctor forum’ taking place in the doctors mess on a monthly basis, it has now evolved through quality improvement methodology over a period of 18 months.

The three main phases were;

1. September 2019 – March 2020, An inclusive all health-care staff health board wide face to face all QI forum. This was advertised by the education department newsletter, Twitter, Posts around the hospital as well as word of mouth. The format was 1.5 hours lunchtime sessions, pizza was available, a 30 minute teaching on QI followed by an informal brainstorming around participants QI projects. The 6 week topic cycles included; introduction to model for improvement, understanding your system, generating ideas for change, testing your change and data visualisation.

With the Coronavirus pandemic the forum was cancelled for a period of 6 months

2. September 2020 – December 2020. Virtual health board forum. This was run using the same format as the face-to-face forum, was accompanied with a teams channel which included a database of ongoing QI projects, QI resources as well as signposting to further QI training.

The sessions were recorded so that staff unable to attend the session could catch up at their convenience.

3. Jan 2021 – present. A Paediatric departmental virtual forum was set up. The format included presenting two in progress QI projects. The session included interactive participation using mentimeter and google jam board to facilitate discussion amongst the team around the QI projects.

Results A total of 110 staff participated in the 11 forums which were run. Staff were from a mixture of medical and surgical specialities and included medical students, physician assistants, advanced nurse practitioners, consultants and junior doctors. There were six health board wide face to face forums, 3 health board virtual forums and 2 virtual paediatrics quality improvement forums. The number of people attending ranged from 0 to 22. The average number of people attending each forum was 10.

Feedback from staff included; appreciating the help with getting started with QI projects, the time to brainstorm their projects and gain input from people from other and their own specialities, they were able to find out about ongoing projects which that they had not previously known about, they loved the opportunity to use the interactive forum as a way to get feedback and problem solve their QI projects.

Conclusions The departmental paediatrics model could be spread to other departments in the health board. It has the advantages of being interesting and relevant to the staff participating enabling a higher quality of input and problem solving. The QI of the QI forum is ongoing.

Paediatric Educators’ Special Interest Group

1670 EARLY EVALUATION OF A RE-DESIGNED MB CHB PAEDIATRIC COURSE USING PERFORMANCE ASSESSMENTS

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Background A redesigned MB ChB Medicine course at the University of Bristol had its first intake of students in 2017 and its first paediatric placement in 2020. An identical paediatric Practice Objective Structured Clinical Exam (pOSCE) was included in the 2020–2021 redesigned paediatric course as was previously in the 2019–2020 course. This provided us with an opportunity to assess any difference in outcome of the new Case Based Learning course.

Objectives We evaluated whether the new redesigned, shorter (6-week versus 9-week) Case Based Learning paediatric course altered student performance in this identical pOSCE.

Methods We evaluated the pOSCE marks of year 4 MB ChB students at the end of their paediatric courses, following initial successful pilot of the formative assessment. The two pOSCE stations (A and B) were identical in 2019–2020 and 2020–2021 and each student’s performance was examined using the same University structured mark scheme. The teaching fellow examiners were different in 2020 and were blinded to the 2019–2020 student marks. We compared student marks of 2020–2021 to 2019–2020.

Results One pOSCE took place in 2019–2020, due to Covid interruption, assessing 33 students. To date, 61 students have sat the pOSCE in the 2020–2021 cohort. After incomplete mark sheets were excluded, our evaluation compared 27