Nursing challenges in hybrid paediatric and adult critical care during the coronavirus disease pandemic

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Following the unprecedented demand for adult critical care beds during the coronavirus disease pandemic, stand-alone children's hospitals increased their capacity to reduce demand for Children's Critical Care (CCC) beds within Tertiary Hospitals. This created additional capacity within CCC to accommodate adults requiring Level 3 beds. While most CCC either redeployed staff into adult critical care (ACC) or converted into being an isolated ACC, the dual speciality within our centre did not allow for this, so a hybrid model was developed. The paediatric team provided care to both adults and children within the same unit, keeping the team together was felt to be in the best interests staff wellbeing, promoting resilience as well as ensuring the continued care and safety of speciality paediatric patients (Deep et al, 2021).

This poster aims to highlight the nursing experience, pitfalls, challenges and adjustments that were made to ensure a high standard of care was delivered to both adults and children; highlighting the different approaches taken during the first and second waves.

EDUCATION AND TRAINING

Challenge:
Nursing staff within the CCC are predominantly paediatric trained in line with Paediatric Critical Care Standards (2015). During the first wave of the pandemic there was an urgent need for training and development of skills to meet the standard of care required for adult admissions. In order to upskill the workforce to be able to manage these patients the following actions were implemented in order to fill the gaps in knowledge.

Resolution
- Use of dual trained nurses within the department and across child health to support paediatric nurses
- Bedside teaching from the adult Practice Development Teams
- Online virtual training for nursing staff
- Resource folders with adult guidelines
- Electronic access to the adult intensive care resources
- Training packages for redeployed staff without critical care backgrounds or for those who have not been in recent clinical practice.
- Regular emails covering key updates, new conditions and medications, safety alerts and recent learning.

STAFFING

Challenge:
In order to maintain the paediatric speciality services and provide additional adult non-covid beds the nursing roster was done in such a way that both groups of patients could be safety cared for using both redeployed adult and paediatric nurses. With covid measures in place, increased sickness and increased Level 3 activity above the nursing establishment; safe staffing levels were difficult to achieve and maintain.

Resolution
- Adult nursing colleagues with critical care backgrounds were redeployed to CCC to increase nursing numbers, knowledge and skill in ACC management
- Staff across child health in non-clinical roles (e.g Clinical Nurse Specialists) were redeployed
- Annual Leave was cancelled or delayed
- Incentives for staff to work additional shifts were made (i.e financial)
- Buddy systems were put in place to ensure that paediatric nurses had access to an adult registered nurse for advice and support

EQUIPMENT, CONSUMABLES & MEDICINES MANAGEMENT

Challenge:
There was a shortfall in equipment available due to the increased demand for ventilated beds across the hospital. Consideration was taken as to the different consumables required for the adult population that were not standard stock. Different fluids and medications were required for the adult patients that were being received.

Resolution
- Retained recently replaced medical equipment to increase the availability to both the CCC and AITU areas; ventilators, monitors, beds and infusion pumps.
- Essential equipment loaned to ensure safety
- Assess to adult medical technical teams
- Initial procurement meeting to identify the required stock for the adult population above the current level, followed by regular review

STAFF WELLBEING

Challenge:
The hybrid model bought exceptional challenges to the nursing team; paediatric nurses cared for a completely different patient group, non-clinical nurses were returned to practice, redeployed adult nurses were working in an unfamiliar area and general paediatric nurses were exposed to both adult and paediatric critical care for the first time. There was an overwhelming willingness to support our adult colleagues; staff felt privileged to be part of the solution but grateful to remain within their team (Kneyber et al, 2020).

Resolution
- Roster flexibility for staff to allow for extra working in addition to adequate rest time
- Provide rest areas to allow for staff to have downtime away from the unit during their shift
- Morning meetings to review daily workload and organise additional support required during the day (i.e turn teams & break relief)
- Maintain appropriate staffing levels for patient acuity to avoid additional stress to staff.
- Food collection arranged daily to avoid staff having to leave the department to go to busier areas of the hospital.
- Constant supply of provisions for staff to take home to avoid the need to shop following shifts.
- Unit Meetings held via Teams to ensure staff were well informed and supported
- Availability of Mental Health resources and support, such as the Employee Assistance Program
- Encouragement to use the wellbeing hub and access to many of the free resources that were available to staff (i.e. meditation and free well being apps)
- Roles for each redeployed group were clearly defined to staff could work within their limitations and there were clear expectations

PATIENT WELLBEING

Challenge:
During this time there were visiting restrictions made for paediatric patients and their families causing anxiety above that of what they were already experiencing. Adult patients visiting was stopped completely with the exception of end of life care, impacting on communication for patients and families and the need for staff to try fill the gaps providing the care and comfort families would have normally provided.

Resolution
- Additional non-clinical support staff to spend time with adult patients helping them to connect virtually with their families if they were able to or contacting families to update them about their loved ones on a daily basis.
- The use of devices donated by external companies to support connectivity for families
- Parent swabbing was initiated to reduce risk to patients and staff.
- Adaptions made to visiting policy to allow for parents to swap over weekly ensure adequate time from them to rest and reduce separation anxiety.
- Patients diary's so parents were able to read about their child's progress

CHANGES BETWEEN THE 1ST AND 2ND WAVE

During the first wave thorough preparations were made before the first adults were admitted into CCC however this was a unique way of working; staff were unsure of what to expect and there were many unknowns. Into the second wave adaptions to the daily management and structure were made through experiential learning, gained confidence and competence of paediatric nurses in caring for adult patients (Levin et al, 2020). These are some examples of the changes to our approach.

- Pharmacy and consumable supply was reduced during the second wave and limited to what was required preventing overwhelming stock
- Staff availability for redeployment during the second wave was reduced due to government enforced guidance and previously redeployed adult staff required elsewhere
- A more flexible approach to patient placement, less cohorting of patients
- Staff annual leave was reduced not cancelled
- Visiting policies had involved with more flexibly for critical ill patients
- Different patient groups with more familiar conditions and transferrable skills were admitted during the second wave (neurosurgery and trauma)
- Nurse felt more empowered during the second wave having had previous experience of nursing adult patients so were less apprehensive and a temporary situation

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