There is very limited information clearly available for those with young children and I aim to explore the relationship between screen time and delayed development in toddlers.

Objectives Determine the literature currently present regarding screen time and its impact on children and young people with a specific focus on sleep and how it affects circadian rhythms.

Locate relevant guidelines and information relating to screen time in the UK and analyse this along with the available literature.

Methods A comprehensive search of the literature was undertaken to assess relevant data and studies pertaining to the described objectives. This included search terms and MeSH such as 'sleep', 'child*', 'screen time' and 'development' with differing Boolean operators to narrow the search criteria.

After analysis of the literature and further research of applicable guidelines, two representative papers were described in detail on the poster with conclusions drawn and recommendations detailed.

Results Although a number of covariates were identified such as socioeconomic status, child's physical activity levels and parental media-habits, many studies concluded that there was an association between increased screen time and delayed development. In particular, higher levels of screen time in children aged 2 and 3 were associated with poor performance on the developmental milestones and that irrespective of other covariates, screen time usage was a factor associated with fewer hours of sleep and longer sleep latency.

A lack of focused guidelines in the UK was uncovered with the majority of evidence being low quality.

Conclusions The neuronal connections formed in the first 3 years of life are of utmost importance and it has been shown that increased screen time in early life has been associated with a negative impact on sleep and therefore neurodevelopmental outcomes. Adequate circadian rhythms are required to achieve optimal neurodevelopment and overexposure to the bright blue light emissions, particularly in the hours before sleeping, has been linked with suppression of endogenous melatonin.

It is imperative that more information be made available to expectant and new mothers regarding screen time and the effects that it can have on their infants. Furthermore, clear guidelines should be developed to allow clinicians to adequately advise families about what is right for their toddlers.

Quality Improvement and Patient Safety

1522

DEPLOYMENT TO THE FRONTLINE – IN SITU SIMULATION AS A TOOL TO MAXIMISE PREPAREDNESS FOR COVID-19

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Background The COVID-19 pandemic required medical staff to quickly adapt to new policies and rota structures. In our large tertiary children's department, speciality paediatric consultants were redeployed to acute paediatrics. All clinical staff required training in new resuscitation protocols and personal protective equipment (PPE) guidance.

Objectives Simulation is an acknowledged educational tool. Our aim was to run in-situ simulations to prepare staff for undertaking resuscitation with appropriate PPE precautions during the evolving pandemic.

Methods In March 2020 we invited all clinical paediatric staff to participate in a 1-hour small group simulation. This focused on donning/doffing PPE and paediatric ABC assessment of the seriously unwell child. Feedback was undertaken using an online tool.

Results The main reason cited for participants to attend simulation was due to changing roles on a new rota, returning from other areas such as research and community paediatrics, and to take the opportunity to refresh skills particularly in the context of other courses being cancelled due to the pandemic.

41 participants provided feedback; 34.1% were non-acute paediatric consultants, 48.8% paediatric residents of all grades and 17.1% nurses. 39.2% of participants did not routinely cover an acute area where emergencies occur prior to the pandemic, and as such would not have taken the opportunity to refresh their knowledge if rota changes were not required.

92.3% felt better prepared for acute paediatric shifts during the pandemic. 70.7% reported reduced stress regarding rota reconfiguration. 97.3% found this a useful educational tool.

Anecdotally staff felt these sessions enhanced an overall sense of comradery, feeling more prepared for the 'worst case scenario'.

Conclusions

- In-situ simulation is a versatile tool which can help prepare medical staff following resuscitation policy changes (eg. during a pandemic)
- It has a positive impact on staff feeling prepared, improving staff morale and confidence during resuscitation.
- As access to and the landscape of educational opportunities change, small session in-situ simulations (while acknowledging physical distancing guidance) has an important role in being a key educational tool during pandemics.

Paediatric Critical Care Society

1523

PERSON BEHIND A PARENT

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Background An article 'Please don't call me mum'¹ in BMJ highlighted the parents' perspective of how they would like to be addressed and empower them in decision making, towards the care of their child. How we as HCPs initially address parents or carers sets the tone for further communication and can have an influence on the quality of the relationship.

Objectives We aimed to explore how parents whose child was admitted to NICU or PICU wish to be addressed. Secondly, we aimed to explore how HCPs in PICU usually address parents.

Methods A questionnaire consisting of check-box choices with option of more than one selection and free text questions was designed to collect data from parents and HCPs.

60 parents from a NICU, postnatal ward and PICU were approached once through child's stay on the unit.

91 HCPs (including consultants, trainees, fellows, nursing and allied health professionals) participated in an online survey in a PICU distributed by closed group network of emails.

Results Results of the survey:

NICU parents (n=30):

Babies' length of stay (median)(days)	70(1–126)
HCPs' who introduced themselves	29/30(96%)
HCPs' who asked parents how they'd like to be addressed	15/30(50%)
Parents' perspective on how they'd like to be addressed as:	'Mum/Dad'
20/30(66%)	'By their name':
None	It didn't matter':
18/30(60%)	
PICU parents (n=30):	
Child's length of stay (median)(days)	30(3–260)
HCPs' who introduced themselves	30/30(100%)
HCPs' who asked parents how they'd like to be addressed	25/30(83%)
Parents' perspective on how they'd like to be addressed	'Mum/Dad':
20/30(66%)	'By their name': 10/30(33%)
	'It didn't matter': 25/30(83%)

HCPs' survey (n=91):

How did you address parents?

(Option of more than one answer selection) 'Mum/Dad':

54/91(59%)	'By their name': 52/90(57%)	'Ask parents': 37/91(40%)
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Some parents on NICU preferred to be called 'mum' or 'dad'. A parent felt that, 'between all the stress and constant worry, it was a reminder that they are still parents'.

A foster carer appreciated use of 'mum/dad' for herself and her husband, as they felt that the staff were acknowledging that 'we see ourselves as mummy and daddy rather than simply carers'.

When the HCPs were asked about barriers they faced in addressing parents by their names, they were worried that they would 'forget their names' or 'get their name wrong'.

Conclusions It is surprising that parents often would like to be called Mum or Dad. Many also do not mind how they are addressed. However, some prefer to be called by their name especially in PICU.

HCPs are often unsure what would be the correct way to address parents and worry about remembering their names.

This study shows the importance of not making assumptions and ask parents how they would like to be addressed.

HCPs may be helped by reminders such as cot cards or badges. However, it may also be polite to admit you do not remember a parent's name and ask them again.

Whilst communicating to parents, it's important to remember 'The person behind a parent'.

REFERENCE

1. Nimmo S. Please don't call me mum. *BMJ*. 2019 Oct 9;367:l5373.

International Child Health Group

1526

USABILITY FOCUSED DEVELOPMENT OF THE NEOTREE-BETA-APP FOR NEWBORN CARE IN A LOW RESOURCE NEONATAL UNIT, MALAWI

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Background Usability is the quality of a user's experience when interacting with an intervention, encompassing the effectiveness, efficiency and overall satisfaction of the user. It is crucial for user engagement and therefore success of digital health interventions. Agile, user-centred approaches are being applied more commonly to the development of healthcare apps but have scarcely been applied to developing digital health interventions for neonatal healthcare professionals (HCPs) in low-resourced hospitals, where usability may be particularly important.

Objectives To evaluate usability and usage of NeoTree, an app for Neonatal HCPs; and to conduct usability-focused development of the NeoTree user interface in a Malawian neonatal unit.

Methods Usability of the NeoTree app was evaluated using think-aloud usability sessions, System Usability Scores (SUS) and iterative feedback during six months of ward use. Usability sessions involved guiding end-users through the app while encouraging them to voice their thoughts aloud. Feedback notes by a facilitator were analysed within an agile 'product backlog', where they were converted into user-stories, grouped into larger 'Epics', and subjected to thematic analysis. Iterative feedback notes were similarly analysed in the same backlog. Resulting adjustments were made to the app either by the researcher via a bespoke web-editor platform (without requiring coding expertise) or coded by developers where necessary. For usage, the number and cadre of HCPs using the app, the proportion of admissions/outcomes captured digitally (*coverage*) and median time taken to complete forms (*completion time*) were calculated.

Results Six neonatal HCPs attended usability sessions in which 20 themes, under 12 overarching themes, generated 57 app adjustments (stories). Forty-three stories (75%) were executed via the web-editor with only 14 (25%) requiring coding by the developers. Themes relating to usability as an electronic medical record included *exhaustiveness of data schema*, *prevention of errors to support data integrity*, *ease of progression through the app*, *efficiency of data entry using shortcuts*, *navigation of user interface* and *relevancy of content*. Themes relating to usability as a clinical decision support system included, *confidentiality of identifiable information*, *cohesion with ward process*, *embedded education and decision support*, *locally coherent language*, *adaptability of user-interface to resource availability* and *printout design to facilitate handover*. Eight HCPs completed SUS. Mean SUS was above average at 88.1 and 89.4. After suggested features were implemented in the app, it was used by 93 different HCPs to record 1323 admissions and 1197 outcomes, over a six-month period.