

Since January 2020, the Myanmar Paediatric Society (MPS) and Royal College of Paediatrics and Child Health (RCPCH) have collaborated on a pilot programme to design and implement Paediatric and Neonatal Early Warning Scores for different age groups, suitable for use in all Myanmar's hospitals.

Meeting remotely and regularly, the WG reviewed existing PEWS assessment tools and escalation criteria. They agreed a standardised scoring system and escalation criteria for Myanmar and also developed a teaching package, comprising pre-recorded lectures with commentaries in Burmese and supervised practice on the wards.

Pilot implementation phase Three hospitals were recruited, representing the main types of hospital in Myanmar:

- **Tertiary Hospital** (Medical Ward 2, Yangon Children's Hospital)
- **Regional Hospital** (Taunggyi Hospital)
- **District Hospital** (Minbu Hospital)

These hospitals audited 127 inpatient paediatric and neonatal records, assessing the completeness of observation charts and the documented response to any clinical deterioration. Following the PEWS chart implementation, the audit is ongoing.

Results Review and design phase

Initial review of existing tools from other countries showed that clinical applicability and staffing constraints in Myanmar precluded their use without some adaptation.

Clinical applicability – Myanmar hospitals treat many children with Dengue Shock Syndrome (DSS) in whom pulse pressure is an important clinical prognostic sign. The Myanmar PEWS scoring chart is the first example in global literature to incorporate this observation.

Workforce – Despite improvements, significant shortages of specialist clinicians remain and therefore escalation policies were adapted to balance the need for rapid clinical response against the backdrop of limited staffing.

Pilot implementation phase We are currently completing data collection following the implementation of the PEWS charts. Early data indicate a positive change (median 24.8%, IQR 22.23%) in observation chart completeness, noting that heart rate is historically well documented; the full dataset, due in early March 2021, should include over 250 charts.

Figure 1-Observation chart change from standard documentation to PEWS incorporation

Conclusions This pilot has shown that collaboration between MPS and RCPCH allowed the development of paediatric and neonatal early warning scores suitable for Myanmar hospitals with limited staffing and their clinical burden, including for the first time, Dengue Shock Syndrome. Implementing these has led to improvements in the accuracy and completeness of observations.

Further data evaluating the impact of this pilot on clinical care will be presented at the meeting.

274

THE SAFETY AND FEASIBILITY OF DELIVERY ROOM CUDDLES DURING THE COVID-19 PANDEMIC

Laura Crosby, Pippa Morrish, Natalia Hackett, Sarah Bates. UK

10.1136/bmjpo-2021-RCPCH.152

Background Preterm birth remains the leading cause of neonatal mortality in the UK. There are well-documented

multifaceted benefits attributed to parental skin-to-skin contact with premature neonates. It is imperative that we incorporate this safely into our care for the vulnerable population of preterm infants. Delivery room cuddles (DRC) aims to optimise this at the earliest opportunity.

Objectives To evaluate implementation of routine preterm DRC at the Great Western Hospital (GWH) with particular focus on feasibility and safety. To evaluate whether practice has changed during the COVID-19 pandemic and to review areas to improve future practice.

Methods Data was collected on babies born below 35 weeks' gestation at GWH from two cohorts: those born between 1/11/2018 and 21/12/2019, and babies born during the COVID-19 pandemic (after 19/3/2020). Data was collected by retrospective review of Badger.net and of written clinical records.

The sample contained 164 neonates with a median gestation of 33 weeks and birth weight of 1849 g. Further demographics and the comparison between groups are detailed in table 1.

Results Overall, 75% of the 164 neonates had a DRC. 82% of babies were stable during the cuddle, and a further 13% clinically improved. 5% had cardiorespiratory or thermal instability. The 6 babies with instability were between 32–34 weeks gestation. 4 experienced respiratory distress during DRC prior to stabilisation. Another 32-week infant required ventilation breaths during DRC which was felt to be due to poor airway positioning. A 34-week infant had a period of bradycardia which had resolved when reassessed on the resuscitaire.

There was no significant difference in admission temperature between DRC and non-DRC groups. The percentage of

Abstract 274 Table 1

	All babies	Pre-COVID	COVID
Number	164	101	63
Median gestation (weeks)	33	33	33
Gestation range	23–34	23–34	25–34
Median BW (grams)	1849	1800	1890
BW range	549–3015	549–3015	870–2570
Female%	43	44	41
Singleton%	70	63	79
Twin%	27	30	21
Triplet%	4	6	0

Abstract 274 Table 2

	Total	Pre-COVID	COVID
Cuddle (%)	All babies	75	84
	Singleton	82	86
	Twin	44	77
	Triplet	100	-
Median cuddle length (minutes)	5	5	4
Stability during cuddle (%)	Stable	82	83
	Improved	13	11
Cardiorespiratory or thermal instability		5	6
Mean admission temperature (°C)	Cuddle	36.8	36.8
	No cuddle	36.8	36.8

infants receiving a DRC increased from 70% to 84% during the COVID-19 pandemic, with no change in mean admission temperature.

Conclusions Our results support DRC as a safe and feasible concept. The DRC ideology empowers women, supports bonding and provides preterm infants with the magnitude of benefits associated with early maternal contact. The recent BAPM maternal breast milk toolkit refers to early contact with parents as a key step in optimising MBM for preterm babies: DRC is an effective strategy in implementing this. Our instability data highlights the importance of following the standard operating procedure and ensuring continual close monitoring during DRC. Examining the mid and longer-term outcomes for DRC neonates and a larger, multi-centre study would be useful contributors to support standardising DRC in practice.

276 EXPOSURE TO MOBILE SCREEN DEVICES IN EARLY CHILDHOOD AND CHILDREN'S LANGUAGE DEVELOPMENT

Luisa Moraes Teixeira, Helen Bedford. UK

10.1136/bmjpo-2021-RCPC.153

Background The use of mobile devices by young children has increased considerably over the last decade and especially after the COVID-19 pandemic. However, high-level evidence on whether the use of digital mobile devices can help or hinder the development of language in early childhood is still lacking. Exposure to mobile devices is a modifiable environmental factor and having a greater understanding of this issue is essential to better guide both policy and practice.

Objectives To investigate the extent to which mobile media exposure (smartphones and tablets) in early childhood (the first five years of life) affects the development of language in typically developing children.

Methods A systematic review (SR) was performed in July 2020 using the Medline, Embase, PsycINFO and Web of Science databases. The search was limited to the English and Portuguese languages and to the last ten years. Articles were reviewed against the inclusion and exclusion criteria. A comprehensive quality assessment tool was developed by combining the recommendations of three previously established guides and the internal and external validity of the selected studies were assessed qualitatively. A narrative approach was used to synthesise the data extracted.

Results The search strategy retrieved 4,443 articles of which 3 met the inclusion and exclusion criteria. The studies included were cross-sectional, published between 2019 and 2020. Their sample size ranged from 117 to 893 participants. The mean age of children varied around 18.7 and 54 months at the time of screen and language assessments. In all studies, boys accounted for approximately 54% of the participants. Different tools were used to assess language and to measure screen time, although all studies assessed both expressive and receptive language. Results of the quality assessment showed that the overall quality rate for all studies was poor. Limitations of the studies were discussed, and confounding variables related to the child, the family and the pattern of mobile device use were analysed. Overall, findings were heterogeneous and placing a dichotomous label for the effects of mobile device use on children's language development was not possible.

Conclusions The findings from this SR show that based on the current literature, it is not possible to categorise the effects of mobile device exposure on children's language development as either beneficial or detrimental, since strong evidence addressing these potential associations is lacking and since there are many covariates around them. Longitudinal studies are needed to clarify cause-and-effect relations and to elucidate the long-term effects of such exposure. Moreover, in order to reduce the risk of information bias, future studies should assess language skills professionally and measure mobile media use electronically rather than rely on parents' reports. In addition, future research should also take into account the content children watch and the quality of parent-child interactions during mobile screen use. Multicentre and cross-cultural studies should be conducted so that the external validity of findings can be increased. Certainly, paediatric societies and policymakers should consider all these factors while issuing recommendations and guidelines.

278 INTEGRATED ELECTRONIC APPOINTMENTS AND FOLLOW UP SYSTEM IN AMBULATORY CARE. SIMPLE IT SOLUTIONS TO COMPLEX PROBLEMS

Arun Mahay, Aditya Raj, Fionnuala Ryan. UK

10.1136/bmjpo-2021-RCPC.154

Background The paediatric ambulatory care department has multiple functions such as administration of IV antibiotics, blood transfusions, urgent outpatient blood tests and clinical reviews. The patients coming into the paediatric ambulatory care unit were organised in a physical handwritten diary with MDT members manually writing down who was supposed to come into the unit.

This led to many issues:

- There was no specific follow up system for these patients. Certain blood tests take 24 hours or longer to come back and when these were missed serious incidents occurred.
- Patients would often be double booked to see the same doctor
- Often the unit had too many patients in it for a single day leading to long waits and lower patient satisfaction
- Patient identifiable information was often illegible in the book making it difficult to understand who was coming into the unit
- There wasn't any space in the book for writing the reasons a patient was coming in. This often led to confusion

We created a computerised system in order to deal with these problems.

Objectives The objectives of this project were:

1. To increase the amount and clarity of patient identifiable details
2. To ensure the reason for the appointments was clearer
3. To reduce the number of double bookings
4. To reduce the number of serious incidents from patients not being followed up correctly.

Methods The multidisciplinary team involved in the project entirely upheaved the appointment system and created a computerised appointments book using excel. We used various techniques to help reduce the number of errors in the input