

Abstract 237 Table 1

Method	Probe Placement	Aim	Threshold
IVC collapsibility/ distensibility	Sub-xiphoid area	Fluid responsiveness	>50%/12%
Ejection fraction	Parasternal long axis view	Cardiac contractility	<50%
Lung ultrasound	Intercostals space to count B lines	Extra-vascular lung water	>3 B lines/ view

tertiary care hospital in Eastern India. The sample size was 56, calculated on the basis of a similar pediatric RCT. Patient enrolment occurred between May 2019 and July 2020. Children aged between 1 month and 12 years with suspected septic shock were randomized to receive either ultrasound or clinically guided fluid boluses (in a 1:1 ratio) and subsequently followed up for primary and secondary outcomes. Exclusion criteria were Dengue, Anaphylaxis, Ascites, and patients with pre-existing chronic kidney disease, interstitial lung disease, heart disease, and adrenal insufficiency. Ultrasound was used in the treatment group whenever there was clinical suspicion of inadequate perfusion.

Results 68 children were enrolled in the study. 4 patients of Dengue and 4 patients who died within 24 hours were excluded. The number (%) of patients with fluid overload on day 3 of admission was significantly lower in the ultrasound group (25% vs. 62%, $p=0.012$) as was the CFB% on day 3 ($6.8 \pm 6.6\%$ vs. $13.4 \pm 10.7\%$, $p=0.019$). Total fluid bolus was significantly lower {median of 40(30–50) ml/kg vs. 50 (40–80) ml/kg, $p=0.003$ }. Resuscitation time was significantly lower in the ultrasound group (13.4 ± 5.6 h vs. 20.5 ± 8 h, $p=0.002$) and so was the requirement of Furosemide (39.3% vs. 71.4%, $p=0.016$). None of the deaths in the ultrasound group were due to unresolved shock ($p=0.101$). There was no significant benefit derived from ultrasound in terms of ventilator duration, inotrope/vasopressor requirement, length of PICU/hospital stay, and mortality.

Conclusions Due to a lack of comparative studies on this topic, our study adds insight into the utility of ultrasound in improving outcomes in septic shock. Ultrasound made the PICU physician exercise restraint in administering fluid boluses and allowed earlier initiation of inotropes. Ultrasound was found to be significantly better than clinically guided therapy, in preventing fluid overload as well as being quicker in achieving initial hemodynamic stabilization. Hence ultrasound is a potentially useful tool for fluid resuscitation in children with septic shock.

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USE OF TELEMEDICINE IN A DEVELOPMENTAL AND BEHAVIOURAL PAEDIATRIC SERVICE DURING THE COVID-19 PANDEMIC: INITIAL EXPERIENCES OF CAREGIVERS & PROVIDERS, SINGAPORE

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Background Telemedicine has been used increasingly as an alternative care model in the Coronavirus 2019 pandemic. The practice of Developmental and Behavioural Paediatrics (DBP) relies heavily on direct child observations and building trust and

rapport with caregivers over time and telemedicine was not routinely used in the Singapore setting.

Objectives We aimed to describe the initial experiences of caregivers and providers with telemedicine in a DBP service in Singapore during this pandemic.

Methods This cross-sectional survey included caregivers who accessed telemedicine (through telephone or video-based platforms) and healthcare providers at a tertiary DBP clinic between 8 April and 14 May 2020, coinciding with the Circuit Breaker (similar to a lockdown) period in Singapore. Participants completed a questionnaire on experiences, perceived benefits and limitations of teleconsultation. Descriptive statistics and tests of comparison were conducted.

Results Around half of the patients ($N = 216$, 47.3%) who were offered a teleconsultation agreed to it, of which 105 caregivers (48.6%) participated. Caregivers had children with diagnosis including autism spectrum disorder (33.3%), language delay (28.6%), and attention deficit hyperactivity disorder (12.4%). Most caregivers felt that their concerns were adequately addressed (98.1%), with good technological connectivity (95.2%). Majority had no difficulty preparing for the teleconsultation (61.0%) and 44.8% reported ease of follow-up with plans after. Perceived benefits included safety (47.6%) and reduced need to take time off work (24.8%). Perceived benefits included safety (47.6%) and reduced time off work (24.8%). Caregivers who had video-based teleconsultation (compared to telephone-based) had more difficulties preparing for the teleconsultation (52.3% vs 27.4, $p=0.03$). These caregivers were also more likely to have difficulties with remembering and following up with plans discussed during the consultation, compared to those who had a telephone-based consultation (52.3% vs 25.0%, p value = 0.02).

Twenty-five providers participated. Providers included paediatricians, allied health therapists e.g. psychologists, speech and occupational therapists and social workers. Fifty-two percent of providers were as satisfied with teleconsultation compared to in person consults. Only 28.0% of providers rated technology infrastructure to be good. Most providers (92.0%) felt safer with teleconsultation. The most common difficulty perceived by providers was incompleteness of consultation without assessing the child physically. The two main perceived benefits of teleconsultation by providers included feeling safer as they were able to minimize physical interaction with patients and being able to provide similarly good care with less inconvenience to patients.

Overall 63.8% of caregivers and 56.0% of providers would continue teleconsultation services post-pandemic. Amongst providers, paediatricians were more likely to continue teleconsultation services after current restrictions were lifted, compared to non-physician providers (100% vs 38.9%, $p=0.008$).

Conclusions Telemedicine was generally well received by caregiver and physician providers. Teleconsultation in a DBP practice setting is a viable option in a pandemic situation and can be considered even beyond this pandemic for continued care.

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TRENDS OF NEONATAL SEPSIS AMONG PRETERM INFANTS BORN <32 WEEKS GESTATION OVER A 13-YEAR PERIOD

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