

## Commentary

## Rethinking 'essential' and 'nonessential': the developmental paediatrician's COVID-19 response

Alastair Fung MD, MPH1, M. Florencia Ricci MD, PhD2

<sup>1</sup>Winnipeg Children's Hospital, Pediatrics and Child Health, Winnipeg, Manitoba <sup>2</sup>Child Development Clinic, Neonatal Follow-up Clinic, Winnipeg, Manitoba

Correspondence: Alastair Fung, Pediatrics and Child Health, Winnipeg Children's Hospital, AE405-840 Sherbrook Street, Winnipeg, Manitoba R3A 1S1. Telephone 204-292-9820, fax 204-787-1938, e-mail funga3@myumanitoba.ca

**Statement of transmittal**: All authors have participated in the research, and have reviewed and agree with the content of the article.

## **Abstract**

While terms such as 'essential' and 'nonessential' used amidst the COVID-19 pandemic may serve a practical purpose, they also pose a risk of obstructing our view of the harmful indirect health consequences of this crisis. SARS-CoV-2 cases and deaths in children are minimal compared to adults, but the pandemic impacts other 'essential' aspects of children's health including child development and the associated areas of paediatric behaviour, mental health, and maltreatment. Alongside the management of severe SARS-CoV-2 cases in emergency rooms and intensive care units, continuing to care for children with developmental disabilities must also be concurrently championed as 'essential' during this crisis. The potentially devastating lifelong effects of the pandemic and isolation on an already vulnerable population demand that action be taken now. Video conferences and phone calls are 'essential' instruments we can use to continue to provide quality care for our patients.

Keywords: Child behaviour; Child development; Coronavirus; COVID-19; Pandemics

In a matter of months, human life has been upturned by the novel coronavirus. Suddenly emerging in our everyday vernacular are words like 'essential' and 'frontline'. These words conjure images of emergency physicians donned in full personal protective equipment, custodial staff, grocery store clerks, mass transit workers, police officers, and fire fighters, among many others. Even within a service deemed essential such as medicine, every hospital department and health care provider is grappling with triaging appointments and surgeries. Stacks of patient folders pile high, labeled as 'nonurgent', 'not a priority'—nonessential. Certainly, there is a utility to using terms like 'essential' and 'nonessential' to categorize priorities amidst a crisis. But such nomenclature also risks obstructing one's view of harmful indirect health consequences of the pandemic—the blind spot of the 'essential'.

The tangible morbidity and mortality from the novel coronavirus are readily witnessed in emergency rooms and intensive care units. But outside the walls of the hospital, more insidious and less apparent effects of the coronavirus on other areas of health care are lurking. Children constitute only a small proportion of SARS-CoV-2 cases and deaths (1). However, behind the daily statistics and epidemiological modeling curves, the coronavirus is affecting other 'essential' aspects of children's health including child development.

The field of developmental paediatrics is an intersection of child development, behavioural, mental health, and child protection issues. Given these overlapping domains, developmental paediatrics is centred on a team-based approach with parents including general paediatricians, neurologists, geneticists, and many allied health care providers including

nurses, psychologists, physiotherapists, occupational therapists, speech-language pathologists, social workers, and child protection workers. Addressing the multiple facets of developmental issues and their effects on families is at the heart of every developmental paediatrician's, and any child health provider's, mandate.

Disasters and pandemics have been shown to detrimentally impact the very 'essential' areas of child health that developmental paediatric teams hold dear. Adjustment reactions in children after a disaster, such as the September 11, 2001 terrorist attacks in New York, include sleep and eating problems, depression, separation anxiety, panic attacks, agoraphobia, difficulties concentrating, substance abuse, risk-taking behaviour, and developmental or social regression (2,3). Risk factors for these adjustment problems include separation from important caregivers and disruption of daily routine (2). During a pandemic, infection control measures such as isolation and quarantine have been shown to lead to post-traumatic stress disorder in a significant proportion of affected youth and parents (4). Moreover, there is emerging concern that the coronavirus crisis could give rise to a child abuse epidemic (5). While physical distancing precautions do have protective intentions, they also inadvertently increase risks of unseen and unreported domestic violence and child abuse (5). With families being told to stay home, rising unemployment, and limited contact of children with their teachers and counselors, stress is running high among caregivers and signs of child abuse can no longer be as readily noticed and reported by community members outside the home (5).

Amidst the coronavirus pandemic, to protect our patients and ourselves, developmental paediatricians and allied health professionals are currently providing services via telemedicine, that is, through interactive audio and video communication between a patient and health care provider at a distant site (6). For most of us working in child health, such physical distancing goes against our natural instincts to connect with and be present in both the joys and sufferings of our patients and their families. Under nonpandemic conditions, phone calls are often thought of by doctors as secondary side tasks. Thus, as is the case with many other activities that are on hold during this pandemic, there is a risk of virtual or phone encounters feeling like a placeholder or temporary bridge to tide us and our patients over until our usual in-person encounters, and life as we knew it, can resume.

The time to address our developmental paediatric patients' needs is now—not later, not after the pandemic. We know that evidence from neuroscience, biology, genetics, and epigenetics suggests that early toxic stress and adverse childhood experiences, such as those wreaked by the pandemic and isolation, can have life-long impacts on the developing child's physical and mental health (7). With typically long wait times for

appointments, and a relatively brief window during which we can intervene early, it is crucial for all developmental paediatricians and their teams to seize telemedicine as a vital tool to continue to provide improvements in quality of life and indeed—essential—care.

Connection of developmental paediatric health care teams with patients and their families during this crisis through virtual visits and phone calls can, itself, be healing. What might seem like a simple phone call follow-up with a young boy's mother for monitoring of attention deficit hyperactivity disorder medication may unveil weeks or even months of uncontrolled attention deficit hyperactivity disorder symptoms now exacerbated by the stresses of stay-at-home measures. If every day felt like a crisis for this mother before the pandemic, one can only imagine the limits to which she is being pushed with daily life at home now. Even just hearing the voice of a trusted child health provider over the phone during times of crisis can provide some stability for patients and their families and an outlet to express their unheard anxieties, fears, and struggles.

In addition to the importance of using telemedicine to remain connected with our patients during this crisis, a growing evidence base has reported on the feasibility and value of utilizing telemedicine in the evaluation and management of developmental paediatric disorders (8-11). A recent pilot study comparing TELE-STAT (Screening Tool for Autism in Toddlers and Young Children), a telemedicine-based screening tool for autism in children aged 24 to 36 months, to gold standard in-person diagnostic evaluations demonstrated a sensitivity of 79% and a very high degree of parental satisfaction (10). Beyond screening, recent developments in telemedicine-based diagnostic tools for autism include TELE-ASD-PEDS and clinical trials are underway to evaluate its accuracy and validity (12). Along with diagnostic strengths, telemedicine has also been shown to offer promising therapeutic potential for complex paediatric feeding disorders (13), paediatric behavioural problems (8), and language delay in children with autism (9).

Far from nonessential, telemedicine platforms may even offer a new window of opportunity to address long-standing challenges in developmental paediatric care provision. We can all think of a child for whom neurodevelopmental assessment was difficult in the unfamiliar environment of the doctor's office, and parents lamenting, "she's not normally like this... she's more herself at home." Virtual encounters with a child in her home environment can provide unique and valuable clinical details that may be difficult to elicit in an office environment (8).

Furthermore, geographic, time, and cost barriers often impede access to developmental paediatric care in underserved areas. By embracing telemedicine, seemingly unreachable remote communities in Northern Canada may now feel well within reach of tertiary care centres (14). Compared to in-person assessments at a hospital-based clinic, telemedicine

consultations to evaluate children for autism for those living in rural areas have been shown to significantly decrease travel time for families, reduce average wait times from time of intake to evaluation, and increase patient attendance rates (10,11).

However, as we explore the benefits of novel telemedicine techniques, we must also be wary of their limitations. Previously reported reservations about telemedicine include poor audiovisual quality, Internet access issues, and a barrier to personal connection when breaking bad news (15). During a time of heightened stress such as a pandemic, we must consider the potentially harmful impact of disclosing challenging diagnoses via telemedicine to often already vulnerable families. Depending on the clinical context, one approach may be to use telemedicine evaluation to identify children with significant developmental concerns as 'at risk', thereby allowing therapies and support services to be established while awaiting an in-person assessment to confirm the diagnosis (10).

We should anticipate that the secondary stressors from the COVID-19 pandemic will escalate the number of children with developmental, behavioural, psychological, and maltreatment concerns both during and in the aftermath of this crisis. At a time when all of us are in need of mutual support, let us not let the care we provide children fall prey to the false dichotomy of essential and nonessential services. And certainly, let us not let children in need of developmental and allied child health services feel that their needs are 'nonessential'. The pandemic has presented us with an opportunity to innovate and utilize telemedicine to optimize care in child development. Our patients need our virtual visits and phone calls now more than ever.

Funding: There are no funders to report for this submission.

Potential Conflicts of Interest: All authors: No reported conflicts of interest. All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

## References

- Wu Z, McGoogan JM. Characteristics of and important lessons from the coronavirus disease 2019 (COVID-19) outbreak in China: Summary of a report of 72314 cases from the Chinese Center for Disease Control and Prevention. JAMA 2020;323(13):1239–1242.
- Schonfeld DJ, Demaria T; Disaster Preparedness Advisory Council and Committee on Psychosocial Aspects of Child and Family Health. Providing psychosocial support to children and families in the aftermath of disasters and crises. Pediatrics 2015;136(4):e1120–30.
- Hoven CW, Duarte CS, Lucas CP, et al. Psychopathology among New York city public school children 6 months after September 11. Arch Gen Psychiatry 2005;62(5):545–52.
- Sprang G, Silman M. Posttraumatic stress disorder in parents and youth after healthrelated disasters. Disaster Med Public Health Prep 2013;7(1):105–10.
- Rosenthal CM, Thompson LA. Child abuse awareness month during the coronavirus disease 2019 pandemic [Published online ahead of print April 24, 2020]. JAMA Pediatr. doi: 10.1001/jamapediatrics.2020.1459.
- 6. World Health Organization. Telemedicine: Opportunities and Developments in Member States: Report on the Second Global Survey on eHealth. Geneva: WHO Press, 2010 [cited May 21, 2020]. <a href="https://www.who.int/goe/publications/goe\_telemedicine">https://www.who.int/goe/publications/goe\_telemedicine</a> 2010.pdf> (Accessed May 21, 2020).
- Garner AS, Shonkoff JP; Committee on Psychosocial Aspects of Child and Family Health; Committee on Early Childhood, Adoption, and Dependent Care; Section on Developmental and Behavioral Pediatrics. Early childhood adversity, toxic stress, and the role of the pediatrician: Translating developmental science into lifelong health. Pediatrics 2012;129(1):e224–31.
- Soares NS, Langkamp DL. Telehealth in developmental-behavioral pediatrics. J Dev Behav Pediatr 2012;33(8):656–65.
- Sutherland R, Trembath D, Roberts J. Telehealth and autism: A systematic search and review of the literature. Int J Speech Lang Pathol 2018;20(3):324

  –36.
- Juárez AP, Weitlauf AS, Nicholson A, et al. Early identification of ASD through telemedicine: Potential value for underserved populations. J Autism Dev Disord 2018;48(8):2601–10.
- Stainbrook JA, Weitlauf AS, Juárez AP, et al. Measuring the service system impact of a novel telediagnostic service program for young children with autism spectrum disorder. Autism 2019;23(4):1051–6.
- Corona L, Hine J, Nicholson A, et al. TELE-ASD-PEDS: A Telemedicine-Based ASD Evaluation Tool for Toddlers and Young Children. Vanderbilt University Medical Center, 2020. <a href="https://vkc.vumc.org/vkc/triad/tele-asd-peds">https://vkc.vumc.org/vkc/triad/tele-asd-peds</a> (Accessed May 21, 2020).
- Clawson B, Selden M, Lacks M, Deaton AV, Hall B, Bach R. Complex pediatric feeding disorders: Using teleconferencing technology to improve access to a treatment program. Pediatr Nurs 2008;34(3):213–6.
- Sevean P, Dampier S, Spadoni M, Strickland S, Pilatzke S. Patients and families experiences with video telehealth in rural/remote communities in Northern Canada. J Clin Nurs 2009;18(18):2573–9.
- Edirippulige S, Reyno J, Armfield NR, Bambling M, Lloyd O, McNevin E. Availability, spatial accessibility, utilisation and the role of telehealth for multi-disciplinary paediatric cerebral palsy services in Queensland. J Telemed Telecare 2016;22(7):391–6.