

BRIEF REPORT

Neonatal healthcare workers' perceptions of the impact of the COVID-19 pandemic

Societal restrictions and infection control measures introduced during the COVID-19 pandemic significantly impacted neonatal care.¹ Restrictions challenged parental presence and participation in models of family integrated care (FICare), an evidence-based approach which supports parents as the primary caregivers for their infant, in partnership with the clinical team.² In addition, neonatal healthcare workers (HCWs) were required to adopt new infection control practices, adapt to service re-organisation and were at risk of exposure to the disease. This study aimed to evaluate neonatal HCWs' perceptions of the impact of the COVID-19 pandemic.

We performed a prospective, anonymous electronic survey of HCWs in two tertiary neonatal intensive care units with established FICare ethos, in July 2020. Thematic analysis of qualitative responses was performed independently by two assessors and coded using nVivo.

The participating neonatal units at the Royal Hospital for Children, Glasgow and Leeds Centre for Newborn Care, each provide regional specialist medical and surgical neonatal services. Restrictions during COVID-19 in both centres required parents to wear face masks and to avoid public transport, permitted only one parent at a time and excluded all visitors.

147 surveys were completed, 82 (56%) in Glasgow and 65 (44%) in Leeds. Of the respondents, 104 (71%) were nurses, 6 (4%) advanced nurse practitioners/specialist nurses, 30 (20%) medical and 7 (5%) administrative, management and housekeeping HCWs. Key themes identified by HCWs were as follows:

1 | NEGATIVE IMPACT ON CARE DELIVERY

PPE and social distancing restricted practical delivery of care and communication. Workload increased to cover colleague absence. Loss of normal opportunities to socialise preventing informal debriefing contributed to increased work-related stress. Rapid changes in policies and processes led to anxiety and confusion.

2 | NEGATIVE IMPACT ON FAMILY INTEGRATED CARE

As outlined in Table 1, parents were felt to be less involved in the care of their baby, less able to bond with them or to develop

collaborative partnerships with the clinical team, due to restrictions on parental presence and new barriers to communication created by PPE. Parental involvement was also affected by loss of face-to-face training and closure of communal areas preventing peer-to-peer support.

3 | INCREASED PARENTAL STRESS

Resulting from increased separation, financial work and childcare concerns, and the loss of normal supports from partners, friends and family.

4 | NEGATIVE IMPACTS ON HCWs OUTSIDE WORK

Healthcare workers (HCWs) lost access to usual hobbies and social activities and reported increased stress and anxiety related to health concerns, childcare and schooling, money and employment, as well as inability to grieve properly following bereavements (Table 1).

5 | POSITIVE ASPECTS OF THE PANDEMIC RESPONSE

Healthcare workers reported improved team working and resilience, organisational efficiency, and rapid adoption of new technologies supporting remote care and working. Reductions in visitors resulted in quieter, calmer units, improved infection control and was felt to give parents uninterrupted time with their babies.

These findings demonstrate the profound impacts of COVID-19 on HCWs and families in the neonatal unit, whilst also identifying positive mitigating developments.

The most striking and concerning effect of COVID-19 was the impact on parental involvement in care and FICare delivery, due to combined effects of reduced parental presence, loss of usual support from HCWs, family and peers. Consistent with our findings, a recent survey of parents in neonatal units during COVID-19 found that 60% reported restrictions on their presence in the neonatal

TABLE 1 Negative impacts of COVID-19 identified by neonatal healthcare workers

Impact on work	
Communication	'Wearing face masks at all times makes communication with families and with the team difficult' 'Inconsistent information with daily or weekly changes'
Workload	'I worked so many additional shifts to assist the ward but also to ease the pain of loneliness'
Morale	'More stress, lower morale' 'Lack of informal interaction with colleagues at handovers/during breaks'
Training	'Unable to run face-to-face teaching' 'PPE training rather than new developments or research'
Impact on patient families	
Family integrated care	'Not being able to support and involve parents in the way in which we normally would, hinders the family integrated care process' 'It's very difficult for fathers to feel involved/connected..., now they must feel excluded'
Peer to peer	'Loss of support and camaraderie between parents due to limited contact'
Mental health	'Parents feeling isolated, anxious, lonely'
Financial	'Cost of transport restrictions to and from hospital' 'More struggles with money for families'
Impact on HCWs outside work	
Mental health	'Living by myself and self-isolating really affected my mental health negatively' 'Loneliness & mental health affected badly when unable to see people out of work'
Physical health	'Have health issues so frightened to catch COVID' 'Worried about catching at work and spreading to family'
Bereavement and grieving	'Bereavement during lockdown, unable to grieve in the normal way' 'Haven't been able to grieve properly with my family'
Childcare and schooling	'My husband and I are both key workers, childcare has been very challenging' 'Concern over schooling and impact on exams to be taken next year'
Financial	'Huge impact on our family financially' 'Anxiety over employment loss for my spouse'

unit, negatively impacting parents' involvement in care, breastfeeding and bonding.¹

HCWs in both centres were resourceful in addressing these challenges. In Leeds, a dedicated Family Support Team was created. In Glasgow, teaching videos were created to replace face-to-face parental teaching, and social media were used to create positive relationships between families and with staff. HCWs lobbied for improved parental access, safe re-opening of parent areas and engaged third sector partners to support parental well-being.

The impact of COVID-19 on communication, between HCWs, and with patient families was also a key theme. Sub-optimal communication is a root cause in patient-safety incidents and complaints. COVID-19 increased the risks of these, by exacerbating causative factors including stress, workload, fatigue and inconsistent instruction.³ Mitigating these challenges were accelerated adoption of live and recorded video services for remote team working, teaching and family communication.

COVID-19 affected HCWs and families mental health, due to the loss of usual social supports, combined with anxieties around health, family and finances. Similar impacts have been described in other disease outbreaks and require organisational recognition and response.⁴ HCWs perceived aspects of their organisations' early pandemic responses as 'top-down' and inconsistent, but recognised that changes in practice and policy were delivered with new and welcome efficiency. Actively identifying these enablers of change may be key to sustaining improvements in healthcare management beyond COVID-19.⁵

Based on our findings, we make three recommendations for the future delivery of neonatal services, during and beyond the COVID-19 pandemic.

1) Family integrated care should be the future standard of care in all neonatal units. Parents should always be supported as primary caregivers and partners in the clinical team.

2) The COVID-19 recovery is an unprecedented opportunity for service re-design and digital innovation, removing previous barriers

to change and delivering more convenient, sustainable, healthier neonatal care.

3) The impact on HCW well-being must be understood and addressed, to support and maintain a healthy, effective workforce.

Our study was limited by absence of accurate response rate data. We did not survey parents as this has been addressed by other authors. Our findings represent a cross-sectional evaluation of HCWs' during a dynamic pandemic.

CONFLICT OF INTEREST

No real or perceived conflicts.

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