FAMILY-CENTERED DEVELOPMENTAL CARE IN THE NEONATAL INTENSIVE CARE UNIT
Parent-Newborn Holding during Therapeutic Hypothermia

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BACKGROUND

Therapeutic hypothermia (TH) in Neonatal Intensive Care Units (NICU) is the standard treatment for neonates with moderate to severe hypoxic–ischemic encephalopathy[1]. Although its neuroprotective efficacy is well established, TH is associated with prolonged physical separation between infants and parents during a critical period for early bonding. In recent years, parent–neonate holding ("cuddling") during TH[2–4] has been explored as a feasible and safe Family-Centered Developmental Care practice[5], with potential benefits for newborn and parental wellbeing. However, its implementation requires significant organisational adaptation and the active engagement of healthcare professionals (HPs).

OBJECTIVES

To explore the feasibility of implementing parent–neonate holding during TH by examining HPs' perceptions, readiness for adoption, and perceived barriers and facilitators in two NICUs.

METHODS

A descriptive cross-sectional implementation study as a Master In Pediatric Physiotherapy thesis is being conducted between November 2025 and March 2026 in two tertiary Italian NICUs. HPs involved in the care of neonates undergoing TH were invited to complete an anonymous online questionnaire following a brief verbal introduction and viewing of a standardized educational video illustrating the parent-neonate holding procedure during TH. The questionnaire was based on an adapted short version of the Normalization Measure Development-NoMAD instrument, grounded in Normalization Process Theory, and assessed four implementation domains: coherence, cognitive participation, collective action, and reflexive monitoring. Quantitative data are analysed descriptively at both item and domain levels, while qualitative free-text responses are analysed using thematic analysis.

RESULTS

Preliminary results show that HP questionnaires received upto January 2026 (nurses 70,9%, neonatologists 22,6%, pediatric physios 6,50%) report a good understanding of the rationale and value of parent–neonate holding during TH (*coherence*), along with a generally positive

willingness to engage in the practice (*cognitive participation*). Greater variability is emerging in the *collective action* domain, with organisational factors such as staffing levels, workload, training needs, and safety concerns emerging as key barriers. Differences in perceptions across professional roles and clinical settings is also being observed. Qualitative findings are expected to further elucidate contextual facilitators and challenges related to implementation.

CONCLUSIONS

This study is providing insights into the feasibility of implementing parent–neonate holding during TH from the perspective of HPs. The perceived barriers and facilitators identifed an guide future implementation strategies and enhance evidence-based FCNDC practices ii NICUs.

Key words: therapeutic hypothermia, NICU, parent–neonate holding,

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