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Occupational Therapy

FROM HOSPITAL TO HOME: FAMILY ADAPTATION AND ROUTINES POST NICU DISCHARGE- A SYSTEMATIC REVIEW

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ABSTRACT **Background:** Preterm birth and NICU admission often disrupt family routines and occupational balance. Parents face challenges in resuming caregiving, employment, and self-care after discharge, yet most interventions remain infant-centered, with limited focus on family adaptation. **Objective:** To systematically review literature exploring how family routines are affected following NICU discharge and to identify implications for occupational therapy practice. **Methods:** Databases including PubMed, Google Scholar, and grey literature were searched (2015–2025) using keywords family routines, occupational balance, family occupations, NICU discharge, and preterm baby. English-language studies focusing on preterm or very low birth weight infants were included. Data were synthesized thematically following PRISMA guidelines and adapted traffic-light grading of evidence. **Results:** Thirty-one studies met inclusion criteria. Most of the parents reported routine disruptions. Sleep, feeding, work participation, and self-care were most affected. Mothers experienced role strain and loss of self-care; fathers reported reduced engagement due to employment demands. Occupational imbalance correlated with stress and reduced well-being. Few studies reported structured, occupation-based interventions during transition to home. **Conclusion:** Family routines undergo significant reorganization post-NICU. Occupational therapists are well positioned to assess occupational balance, support co-occupations, and facilitate individualized, routine-based discharge planning. Integrating occupation-centered, family-focused approaches can strengthen parental adaptation, resilience, and infant developmental outcomes.

KEYWORDS : Preterm Infants; NICU Discharge; Family Routines; Occupational Therapy.

INTRODUCTION

Every year, preterm births necessitate NICU care disrupt not only infant health trajectories but also the rhythm of family life. Following discharge, parents struggle to re-establish daily routines. Mothers often face challenges balancing intensive caregiving with household responsibilities, while fathers juggle employment, caregiving, and partner support, often at the cost of self-care [1,2]. These disruptions affect sleep, work patterns, social participation, shared family roles, parental mental health and infant outcomes [3,4,5].

From an occupational therapy perspective, such instability impacts core occupations of parenting and family routines, highlighting the need for structured support in role adaptation, coping, and meaningful daily activity planning [4,5,6,7].

Despite growing international evidence, most NICU interventions continue to focus on the infant's medical needs, with less attention given to family routines and caregiver well-being [1,4,8,9]. Importantly, there is limited published evidence on how families adapt their daily lives after NICU discharge. Cultural expectations, joint family systems, socioeconomic disparities, and limited access to rehabilitation professionals add further complexity to the transition from NICU to home. This creates a unique gap in understanding the lived experiences of Indian families navigating post-NICU challenges.

Therefore, this systematic review will bring together existing research to explore how family routines are affected post-NICU discharge.

This review will provide evidence to guide occupational therapy and other health professionals in supporting families more effectively during this critical transition.

Hence, the objective of this systematic review is to identify, analyse, and synthesize the existing evidence on how family routines are affected following the discharge of infants from the Neonatal Intensive Care Unit (NICU).

MATERIALS & METHODS

Literature Search-

Data was extracted using databases like- Pubmed, Google scholar, grey literature from 2015-2025.The keywords used were – "family routines", "occupational balance", "family occupations", "NICU discharge", "preterm baby".

Study Selection-

Studies were considered eligible if they met the following criteria:

- Published between 2015 and 2025.
- Written in English.
- Included the keywords
- Focused on preterm infants

RESULT

Out of all the articles screened,31 articles were eligible for review. Sample sizes ranged from small qualitative groups of 10–20 parents to larger surveys with >100 respondents.

Data was extracted based on the details, design, setting, sample, and key findings of each article. traffic light synthesis was used to analyse the result.(Novak I, McIntyre et al.)[31](Fig .1)

Fig. 1- Traffic Light Synthesis

Red- OT routine focussed intervention(scarce)
Yellow- Time to re-establish routines(4-11 months), Return to work barriers(father), Feeding routines- non linear; high load, meaningful activities foster transition, Paternal role shifts (variable involvement), Family resilience (emerging).
Green-Technology dependence: Caregiver burden and isolation, Maternal identity and role strain,Routine disruption(sleep, self, care, roles), occupational balance:parental health, Discharge readiness and learning needs.

DISCUSSION

1. Overview of Disruption to Family Routines

Research shows that the birth of a premature infant and NICU admission disrupt family routines and occupational balance. Over 90% of parents report altered routines, with return to normalcy often delayed 4–11 months after discharge (Jiménez-Palomares et al., 2021). Families reorganize sleep, meals, work, and leisure around infant care, often describing the experience as a "crisis of occupations." Even after discharge, medical devices, frequent appointments, and heightened caregiving demands extend disruption at home. Mothers often equate this with full-time work. These findings underline the need for family-centered strategies to support smoother routine adaptation post-

NICU.[5,13,16]

2. Occupational Role Shifts and Identity Formation

Studies highlight disruptions to parental occupational identity during NICU care. Mothers juggle caregiving, household demands, and other children, while fathers prioritize employment and partner support, often suppressing their own needs (Gibbs et al., 2015)[1,21] Within MOHO, parents' volition, routines, and performance are disrupted, with occupational identity temporarily suspended—for instance, mothers hesitating to call themselves "mom" until discharge. Adaptation requires new routines, skill-building, and gradual confidence restoration[12,18]

3. Maternal–Paternal Differences and Co-Occupations

Although NICU research has focused mainly on mothers, fathers also experience emotional and occupational strain (Salazar, 2022), [21,23]. Mothers face major disruptions to self-care and social life, while fathers balance early return to work with hidden stress. Both parents find co-occupations—like kangaroo care and feeding—essential to feeling like parents and regaining competence[6,27]. These findings highlight the need for family-centered care that supports shared routines and includes fathers as active caregivers. [9,20].

4. Transition Home: From "Functioning Only" to "Balanced Activities"

Parents move from performing medical tasks to gradually building confidence and balancing self-care with family life, but few interventions support this transition. The gap prolongs stress and occupational imbalance. Programs like HAPPEE (Berginski, 2023), [17,24] show that occupation-based approaches can boost parental confidence, reduce stress, and strengthen bonding—underscoring the role of occupational therapy in coaching, discharge planning, and routine-based support. [7,15]

5. Feeding and Breastfeeding as a Central Occupational Challenge

Several articles (Froehlich et al., 2015; Supporting the Role and Transition to Motherhood Through Feeding), [6,15] highlight infant feeding as an all-consuming occupation in the early postpartum and post-NICU period. Routines are initially chaotic and unpredictable, stabilizing only after several weeks—often coinciding with mothers' return to work. ([16,25]) Breastfeeding mothers experience reduced time for self-care, relationship maintenance, and leisure, further contributing to occupational imbalance. OT's role in activity analysis of feeding, establishing balanced routines, and supporting maternal confidence is crucial but underutilized. [6,15]

6. Family Resilience, Social Support, and Contextual Factors

Extended families, peer support, and socio-cultural norms influence recovery and adaptation.[26,27]. In low-resource or rural contexts, lack of rehabilitation professionals and discharge planning magnify stress (Granero-Molina et al., 2019)[14,17,19] Family resilience, characterized by shared meaning-making and reorganization of activities, predicts better adaptation (Lian et al., 2021). OTs should therefore integrate resilience-building and culturally tailored interventions within post-NICU care. [1,28].

CONCLUSION

- Collectively, the literature reviewed indicates that current NICU care models still privilege the infant's medical needs over the caregivers' occupational well-being. Occupational therapists are uniquely equipped to address this gap by:
- Assessing parental occupational balance during hospitalization and post-discharge
- Including fathers and non-traditional caregivers in therapy sessions and discharge planning.
- Using meaningful activities and co-occupations (feeding, kangaroo care, narrative writing) to support occupational identity and adaptation.
- Providing individualized, routine-based discharge education that integrates the infant's care into the family's unique lifestyle rather than imposing hospital schedules
- Embedding psychosocial and resilience-building supports to mitigate maternal mental health risks during the transition home Such occupation-centered, family-focused approaches have the potential to improve not only parent well-being but also infant developmental outcomes.

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