PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	Caring for children with new medical technology at home: parental perspectives
AUTHORS	Pitch, Natalie Shahil, Anam Mekhuri, Samantha Ambreen, Munazzah Chu, Stephanie Keilty, Krista Cohen, Eyal Orkin, Julia Amin, Reshma

VERSION 1 - REVIEW

REVIEWER	Dr. Surendra Gupta Childrens Medical Center of Fresno, Pediatrics
REVIEW RETURNED	30-May-2023

GENERAL COMMENTS	Author should re-consider writing objective in the abstract: Following is suggested objective for better understanding the aim of study and more interest generating. Objectives: This qualitative descriptive study explores the experiences of family caregivers (FCs) of children with medical complexity (CMC) who are initiated on new medical technology in the hospital and transition to new daily life at home. The study aims to investigate FCs' response and readiness for medical technology use, the value of education and transition support, and the challenges associated with managing new medical technology in the home. Although, Author tried to point out study limitations but following limitations are important to mention to provide better guidance for future research and studies: Small sample size: The study included a total of 14 family caregivers (11 mothers and 3 fathers). While the researchers reached data saturation, meaning that new themes did not emerge from additional interviews, the small sample size limits the generalizability of the findings. The experiences and perspectives of these caregivers may not be representative of all family caregivers of children with medical complexity. Selection bias: The participants were recruited from a larger prospective observational study, and only those who agreed to participate were included in the qualitative study. It is possible that those who chose to participate may have different experiences or perspectives compared to those who declined, introducing selection bias. Lack of diversity: The study was conducted at a tertiary pediatric hospital in Toronto, Canada. The sample may not be representative

	of the broader population of family caregivers of children with medical complexity, particularly in terms of cultural and socioeconomic diversity. The experiences and challenges faced by caregivers from different backgrounds may differ. The findings may be influenced by cultural, socioeconomic, and healthcare system factors unique to the study setting. Therefore, caution should be exercised when applying the study findings to other populations or contexts. Self-reporting bias: The data collected in the study relied on self-reported experiences and perspectives of the family caregivers. There is a possibility of recall bias or social desirability bias, where participants may provide responses they believe are expected or favorable. The FCs' responses may be influenced by their desire to present themselves in a positive light or their ability to accurately recall specific details or experiences. Limited scope: The study focused on the experiences of family caregivers from the time their child was initiated on medical technology in the hospital to the transition to home. It does not provide insights into long-term experiences or the effectiveness of the Connected Care Program in the broader context of pediatric homecare. Lack of comparison group: The study did not include a comparison group of family caregivers who did not receive the Connected Care Program. Without a control group, it is difficult to determine the specific impact of the program on the caregivers' experiences and outcomes. Furthermore, the study primarily focused on the perspectives of FCs and did not include perspectives from other key stakeholders, such as healthcare professionals or home healthcare providers. Including multiple perspectives could have provided a more comprehensive understanding of the challenges and support needs during the transition from hospital to home with new medical technology. Despite these limitations, the study provides valuable insights into the experiences and challenges faced by family caregivers of children with medical complexity and highlights the need for comprehensive education and support programs for these caregivers. The small sample size, limited generalizability, reliance on self-report data, and absence of perspectives from other stakeholders are important limitations to consider when interpreting the findings. Further research with larger and more diverse samples is needed to validate and expand upon these findings.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Author should re-consider writing objective in the abstract: Following is suggested objective for better understanding the aim of study and more interest generating.

Objectives: This qualitative descriptive study explores the experiences of family caregivers (FCs) of children with medical complexity (CMC) who are initiated on new medical technology in the hospital and transition to new daily life at home. The study aims to investigate FCs' response and readiness for medical technology use, the value of education and transition support, and the challenges associated with managing new medical technology in the home.

Thank you for your comment. We have adjusted the objectives in our abstract to your suggestion to more clearly articulate the aim of the study.

Although, Author tried to point out study limitations but following limitations are important to mention to provide better guidance for future research and studies:

Small sample size: The study included a total of 14 family caregivers (11 mothers and 3 fathers). While the researchers reached data saturation, meaning that new themes did not emerge from additional interviews, the small sample size limits the generalizability of the findings. The experiences and perspectives of these caregivers may not be representative of all family caregivers of children with medical complexity.

Selection bias: The participants were recruited from a larger prospective observational study, and only those who agreed to participate were included in the qualitative study. It is possible that those who chose to participate may have different experiences or perspectives compared to those who declined, introducing selection bias.

Lack of diversity: The study was conducted at a tertiary pediatric hospital in Toronto, Canada. The sample may not be representative of the broader population of family caregivers of children with medical complexity, particularly in terms of cultural and socioeconomic diversity. The experiences and challenges faced by caregivers from different backgrounds may differ. The findings may be influenced by cultural, socioeconomic, and healthcare system factors unique to the study setting. Therefore, caution should be exercised when applying the study findings to other populations or contexts.

Self-reporting bias: The data collected in the study relied on self-reported experiences and perspectives of the family caregivers. There is a possibility of recall bias or social desirability bias, where participants may provide responses they believe are expected or favorable. The FCs' responses may be influenced by their desire to present themselves in a positive light or their ability to accurately recall specific details or experiences.

Limited scope: The study focused on the experiences of family caregivers from the time their child was initiated on medical technology in the hospital to the transition to home. It does not provide insights into long-term experiences or the effectiveness of the Connected Care Program in the broader context of pediatric homecare.

Lack of comparison group: The study did not include a comparison group of family caregivers who did not receive the Connected Care Program. Without a control group, it is difficult to determine the specific impact of the program on the caregivers' experiences and outcomes.

Furthermore, the study primarily focused on the perspectives of FCs and did not include perspectives from other key stakeholders, such as healthcare professionals or home healthcare providers. Including multiple perspectives could have provided a more comprehensive understanding of the challenges and support needs during the transition from hospital to home with new medical technology.

Despite these limitations, the study provides valuable insights into the experiences and challenges faced by family caregivers of children with medical complexity and highlights the need for comprehensive education and support programs for these caregivers. The small sample size, limited generalizability, reliance on self-report data, and absence of perspectives from other stakeholders are important limitations to consider when interpreting the findings. Further research with larger and more diverse samples is needed to validate and expand upon these findings.

We thank you for your comprehensive analysis of the limitations to our study, which are critical to acknowledge when interpreting the findings. We have now included all of these limitations in our manuscript as per your recommendation.