Paediatric Homecare Risk Management: A Functional Resonance Analysis Method Study of Incident and Risk Assessment Management

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SUMMARY

Paediatric homecare is an advancing field of healthcare and risk management is an integral component of these services. This study is part of a larger study into integrated risk management in paediatric homecare risk management.

Through interviews with nursing staff using Grounded Theory methodology, analysis of the risk management components was undertaken using Function Resonance Analysis Method (FRAM). The results indicated a clear mapping of the functionality of the process for incident reporting and the assessment of risks. Resonance was evident in several key functions allowing system changes for organisational improvements to enhance quality of care.

KEYWORDS

Paediatric Homecare, Risk Management, Functional Resonance Assessment Method

Introduction

Children with complex healthcare needs being nursed in the community are a growing field globally and in Ireland. The definitions vary throughout the world with the use of terminology such as life limiting conditions, medical dependent children, and children with complex care needs. Researchers have undertaken systemic concept analysis of the multidisciplinary language of children with complex care needs. The term Complex and Integrated Care Needs (Brenner et al., 2021) defines the overall current position.

In Ireland it is estimated that there were 3840 children living with life limiting conditions in 2010 (Kerr et al., 2019). Ling et al compared the prevalence rate of 12 per 10,000 populations to the 2005 Irish census data giving an estimated 1369 children living with life limiting conditions. This is likely to be an underestimate and recent data from the Laura Lynn Foundation put the estimated figure at 14.5 per 10,000 populations (Ling et al., 2015).

The risks that healthcare workers face in the home such as lone-working, lack of training and supervision. In a scoping review of the literature researchers found that adverse drug events, line related, technology related, infections, catheters, wounds, and falls adverse events were all evident in the home setting (Masotti et al., 2010).

Methodology

In-depth semi structured interviews were conducted with 19 nurses working in paediatric home care in Ireland. The qualitative approach used was the constant comparative analysis method, theoretical

sampling and memo writing of Grounded Theory (Glaser & Strauss, 1967). The interviews took place in 2020 and were themed around risk management, governance, human factors, healthcare, and quality.

In the coding of interview data, the principal investigator mapped the functions of incident and risk assessment management using FRAM as a method for assessing resonance and variability of the functions (Hollnagel, 2012). The FRAM can be described in four principals; firstly, the assessment of work as done, compared to work as imagined. Secondly, that of socio-technical systems adjust to match the conditions. Thirdly, the outcomes are emergent and finally the interdependent relationships between the functions and the resonance this can cause.

Results and Discussion

Results demonstrated an essential mapping of functionality for risk assessments and incident reporting. Mapping enabled function analysis to the variability and resonance of each function to assess work as done.

Risk Assessments

Risk assessments being an integral component of homecare arise from sources of information pertaining to the service provision. Assessments of clinical and nursing need being an example. The reliance on sharing of information across the Multi-Disciplinary Teams (MDT) to assess the impact of a known risk relies heavily on human behaviour, in knowing the value, and then transferring sources of information across the MDT. The resonance and subsequent impact can affect quality of service provision.

Incident Reporting

Incident reporting relies on staff ability, knowledge, and integrity to report an event meeting policy definition of an incident. The FRAM identified a function whereby minor issues arising during care are discussed from staff to management and that solutions were immediately be implemented. Outside of a formal structure of reporting this would have resonance for wider learning and trend analysis. The system of reporting was changed to adapt to mitigate this resonance.

Discussion

Sharing information across the MDT is essential for the ability of staff to assess risk in a dynamic socio-technical system. Reporting systems must be flexible and adaptive to enable capturing of critical learning data.

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