Purpose:

Children are very vulnerable to experiencing medication errors. They may be unable to communicate adequately, or may have a limited ability to address problems arising from medications. In addition, they may have a limited understanding about the medications they take compared with adults (Psaltis, 2014). Children vary in weight and organ maturity, which can affect their body’s ability to use medications (Mahmood & Burckart, 2016). For this paper, children are defined as those aged from newborn to 18 years, and family members are people comprising the children’s kinship outside of hospital.

Medication errors commonly occur in hospitalised children (Alomari, Wilson, Solman, Bajorek, & Tinsley, 2017; Rishoej, Almarsdottir, Christesen, Hallas, & Kjeldsen, 2017). Hospitalised children are also very vulnerable if a medication error occurs because there is a great chance that harm will take place (Rinke et al., 2014). Harm includes death, disease, injury, suffering or disability experienced by the child, and involves physical, psychological or emotional forms of harm.

Past work involving hospitalised adults has shown that communication problems are the major cause of medication errors (O’Connell et al., 2016; Smith et al., 2016). Communicating with patients and family is closely associated with engaging individuals in managing medications. The concept of engaging hospitalised children and families with managing medications has rarely been considered as a means of attempting to improve medication safety, and to reduce medication errors. For this paper, engagement refers to supporting children and families to obtain necessary knowledge about the condition being treated and the appropriate proven medications and non-medications, to participate in decisions that reflect their preferences and values, and to influence medication decisions (Gwara, Smith, Woods, Sheeren, & Woods, 2017; Knall et al., 2017).
The aims of this paper are to: examine how children and families are involved in managing medications in hospital; and to identify possible opportunities for child and family engagement with managing medications.

Methods:

Using an ethnographic research design (Tickle, 2017), the study was undertaken at an Australian, tertiary, 334-bed, paediatric teaching hospital. Participants included doctors, nurses, pharmacists, hospitalised children and families. Interviews, observations and focus groups were conducted from March 2014 to February 2016 in three wards comprising a medical ward, a surgical ward and a specialist, mixed medical and surgical adolescent ward. A retrospective clinical audit was also conducted from July 1, 2010 to June 30, 2015 of all reported medication errors occurring in the hospital.

Interviews, observations, and focus groups were analysed thematically using the ‘framework’ approach (Gale, Heath, Cameron, Rashid, & Redwood, 2013). This approach of five stages involved: familiarisation, identifying themes, indexing, charting, and mapping and interpreting the findings. Descriptive statistical analysis was undertaken for the clinical audit.

Results:

In all, 200 hours of audio-taped observations were undertaken. There were 141 hospitalised children and their families who were involved in observations relating to communicating about managing medications. While observations comprised children of all ages, interviews were conducted with children aged at least 8 years of age. Semi-structured interviews were conducted with 58 individuals. In addition, 74 health professionals participated in focus groups.

Themes comprised sociocultural and environmental influences on engagement, effects of the actual communication encounter on engagement, and outcomes of communication.

Sociocultural influences pertained to children’s ability to articulate their understanding about medications depended on their desire to know about the medications prescribed to them and their ability to communicate needs. There was a strong reliance on having parental presence in guiding medication management.

Environmental influences included miscommunications following children’s transfers of care between diverse hospital settings, and interactions involving medical staff of different specialties.

Actual communication encounters influencing engagement comprised two types. The first type comprised children and health professionals. These encounters were short in length, and largely involved one-on-one encounters with nurses or pharmacists. The second type comprised encounters with children, families and health professionals, which tended to be variable in length. These encounters were more comprehensive in nature, which were initiated by health professionals and families.

The outcomes of communication comprised the results of the clinical audit, which identified children’s and families’ involvement in identifying medication errors. There were 3,340 medication errors during the audit period at the hospital. Children or family members were involved in identifying medication errors in 15.4% (n=515) of cases. Involvement occurred regardless of whether the child required medication for treatment of an acute or chronic condition, and for regularly-prescribed and newly-commenced medications.

Conclusion:

It is important that nurses acknowledge that hospitalised children and family members play an important role in the management of medications. Creating opportunities for engagement between health
professionals, children and families can lead to improved medication management and a possible reduction in medication errors. Targeted communication for engagement could focus on nurses seeking out children’s and families’ views when plans are made for patient transfer of care, and prior to, during and following medication activities.

Title:
Communicating With Hospitalised Children and Families in Managing Medications: Examining Possibilities for Engagement

Keywords:
Child and family engagement, Communication and Medication management

References:


Abstract Summary:
Children are very vulnerable and particularly susceptible to experiencing medication errors. Engaging with children and their families has been recognised as an important way of promoting patient safety. This paper reports on hospitalised children's and their families' communication with health professionals about managing medications to examine possibilities for improved engagement.

Content Outline:
1. Background
   a. Children’s vulnerability and susceptibility to experiencing medication errors
   b. Participation and engagement by children and families in managing medications in hospital

2. Aims

3. Method
   a. Data collection
   b. Data analysis

4. Results
   a. Sociocultural and environmental influences on engagement
   b. Effects of the actual communication encounter on engagement
   c. Outcomes of communication

5. Conclusion
   a. Summary
   b. Contribution to nursing practice and scholarship
   c. Implications for clinical practice, education and policy
   d. Future research

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**Professional Experience:** Elizabeth Manias is a registered nurse and registered pharmacist with expertise in pain management, medication management, decision making, communication processes and patient involvement. Her research endeavours have made a sustained contribution in how decisions are made between health professionals, patients, and family members. To date, she has received competitive research funding from diverse sources, including the Australian Research Council and National Health and Medical Research Council to support her research endeavors. She has published extensively in journals such as Western Journal of Nursing Research, Annals of Pharmacotherapy, Social Science & Medicine, Quality and Safety in Health Care, The Journal of Pain, Clinical Journal of Pain and Journal of Advanced Nursing. She has also been actively involved with Sigma Theta Tau International in reviewing research grant and award applications.

**Author Summary:** Professor Manias is a registered nurse and registered pharmacist, with expertise in medication safety and understanding the interconnections between medication safety, health care communication, and patient and family engagement. Her work on medication safety extends across the lifespan from the infants to the oldest old.

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**Third Author**
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Fourth Author
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Professional Experience: Professional Experience Associate Professor Cranswick is an experienced paediatric physician with qualifications in medicine and law. He has considerable expertise in clinical pharmacology and therapeutics, and promoting equity of access for safe medication use in children. Author Summary: Associate Professor Cranswick’s program of research involves understanding how medication errors occur in hospital, and the development and implementation of strategies aimed at improving medication use in children in developed and developing countries.

Fifth Author
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Seventh Author
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Author Summary: Ms. Rosenfeld’s research involves the conduct of research on medication safety encompassing diverse research methods, including observations of clinical practice, interviews, focus groups and clinical audits.

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Professional Experience: Ms. Weiner is a qualified psychologist with expertise in understanding health professionals and patients’ behaviour in diverse clinical environments, and the ways in which this behaviour impacts on medication management, particularly for children and their families.

Author Summary: Ms. Weiner’s research involves the conduct of research on medication safety encompassing diverse research methods, including observations of clinical practice, interviews, focus groups and clinical audits.

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