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Pediatric MISSCARE Survey To Fill In The Gaps

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PEDIATRIC MISSCARE SURVEY TO FILL IN THE GAPS

by

MOLLY BAKER

A thesis submitted in partial fulfillment of the requirements
for the Honors in the Major Program in Nursing
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Abstract

Missed nursing care, according to Kalisch and Williams, is nursing care that is not completed to the highest quality of care, leading to an increase in hospital costs and poor patient outcomes. Missed nursing care can occur with any patient population; however, a survey by Kasich called the MISSCARE Survey has only been used in the adult and neonatal populations. Pediatric patients are a diverse and complex subset of the population, differing greatly from the adult and neonatal populations, thus identifying a need for a focused pediatric survey to effectively study missed nursing care in the pediatric setting. The purpose of this research, therefore, was to create and validate a pediatric nursing care survey

A convenience sample of 10 pediatric experts completed the Expert Panel Survey to determine a content validity ratio (CVR) and content validity index (CVI) of a modified, MISSCARE Survey (Kalisch & Williams, 2009). Items determined to be essential by ninety percent or more of the participants ($CVR > 0.78$), were included in the MISSCARE-Pediatric Survey.

Results showed that the CVI of the MISSCARE-Pediatric Survey determined by the Expert Panel was 0.9, meaning the items are essential to the pediatric population (Gilbert & Prion, 2016a). The created MISSCARE-Pediatric Survey includes 18 questions in section A (Types of Missed Nursing Care), 28 questions in section B (Reasons for Missed Nursing Care), and 9 questions in Demographics. Future research will determine content reliability of the MISSCARE-Pediatric Survey.

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Introduction

The health care system includes adult patients as well as pediatric patients, ranging anywhere from zero to 18 years old. Pediatric patients are multifaceted and diverse. The developmental age and level of dependence varies in pediatric patients, therefore they need a unique and individualized health care plan (Lacey, Smith, & Cox, 2008). The complexity and challenges this creates for pediatric nurses while developing a standardized approach to care is paramount. Pediatric nurses have to create a trusting relationship with their patients in order to have patients efficiently cooperate with treatment (Rudolf & McCarron, 2011). To insure a cooperative relationship, nurses have to assess each patient's developmental age to accurately communicate with the child.

Children are complex due to the fact that they require a family-centered plan of care. Family-centered care is nursing care that focuses on the needs and competencies of the family and the patient; this is used in order to provide appropriate nursing care (Lacey et al., 2008). The pediatric population includes individuals under 18 years of age, which requires the caregiver's consent for treatment and procedures. Juveniles also depend on their caregiver for support, strength and consent causing the pediatric population to require a greater focus on family-centered care than the adult population (APA, 2012). Family-centered care is also important when it comes to educating the patient about their care and how to continue care at home. While conducting care, nurses assess the patient and the caregiver's emotional stress. The nurse will improve coping and mental health for the patient and the parent(s) by providing competent

family-centered care (Lacey et al., 2008). This type of care is completed with interventions to lower stress of the parent or guardian. An intervention often used to decrease caregiver stress is having parents keep track of the patient's intake and output. The simple task gives the parent a mechanism to contribute in the care of their child. The need to educate the patient and the caregiver(s) in an effort to achieve family-centered care often creates an extra aspect to a nurse's workload. Additional workload, in turn, can increase missed nursing care in the pediatric setting (Kalisch, Landstorm, & Williams, 2009).

The MISSCARE Survey (Kalisch & Williams, 2009) has been adapted previously in an attempt to study a subset of the pediatric population in the neonatal intensive care unit (NICU) (Tubbs-Cooley, Pickler, Younger, & Mark, 2015). The survey was modified to remove unnecessary terms, for example "ambulation" since neonates cannot walk and to add neonatal terms, interventions and assessments (Tubbs-Cooley et al., 2015). The final survey was reviewed by neonatal nurses and advance practice nurses to reassess the face and content validity of the NICU adapted MISSCARE Survey.

The NICU modified survey does not measure the general pediatric setting (Tubbs-Cooley et al., 2015). Tubbs-Cooley et al. identify the NICU as an intensive care unit which uses a 2:1 nurse to patient ratio that includes only the neonatal population. The general pediatric population includes general medical/surgical units, intensive care and step-down units. The general medical/surgical units have higher nurse to patient ratios, often 1:4 (Kasprak, 2004). The higher ratios can cause more issues including staffing shortages and lack of resources leading to possibly, increased missed care (Kalisch, Landstorm, & Williams, 2009). The general pediatric population includes individuals from zero to 18 years old, which includes a variety of different

developmental stages and intervention needs (Beal et al., 2004). The NICU population only includes newborns until they are healthy enough to be discharged, or stable enough to be transferred to a pediatric population after certain hospital policies have been met (Tubbs-Cooley et al., 2015). The NICU population; therefore, is a very small subset of the pediatric population requiring the need for a specific pediatric missed nursing care survey.

The pediatric population includes specific risk factors for missed nursing care, thus, substantiating a need for an individualized survey. These risk factors include: high complexity of the pediatric population, a dependence on family-centered care, and high patient ratios. A revised pediatric survey allows for these risk factors and potential missed nursing to be assessed. The newly adapted MISSCARE-Pediatric Survey (Díaz, Kalisch, & Baker, 2018) for example includes patient ambulation as some of the patients need to be ambulated three times daily, while other patients need different interventions (e.g., tummy time) compared to the NICU survey.

Background and Conceptual Framework

Missed nursing care, as defined by the Patient Safety Network (2016), is nursing care that is either delayed, uncompleted, or not completed to the fullest. Missed care or omitted care can lead to increased hospital costs, increased rates of re-admissions, and poor patient outcomes (Bitter, Gravlin, Hansten & Kalisch, 2011). Missed nursing care has been studied by Kalisch, Landstorm et al. (2009) in 28 different adult inpatient units. They found over 73% of nurses missed basic nursing care, including ambulation, patient teaching, assessing the effectiveness of medications, and delivery of as needed or pro re nata (PRN) medications in a timely manner. Winsett, Rottet, Schmitt, Wathen, and Wilson (2016) found that mouth care, timely medication

administration, and ambulation was missed over thirty percent of the time. Reasons behind missed care were varied.

The MISSCARE Survey (Kalisch & Williams, 2009) has been utilized in numerous studies, all of which include the adult population (Kalisch, Gosselin, & Choi, 2012; Kalisch, Xie, & Ronis, 2013). Psychometrics in an adult population were initially reported and were found to be reliable in 2009 by Kalisch and Williams. Currently, this survey has not been adapted and tested for the general pediatric population. In an effort to adequately administer the survey, the MISSCARE Survey (Kalisch & Williams, 2009) needed to be revised in an effort to adopt specific pediatric terms.

Tubbs-Cooley et al. (2015) adapted the MISSCARE Survey (Kalisch & Williams, 2009) to include terms and interventions or assessments that would match the NICU population. The modified survey includes questions about oral care for ventilated babies and repositioning babies every two hours. The revised survey removed adult-related survey questions, including patient ambulation (Tubbs-Cooley et al., 2015). They found that NICU nurses reported missing “daily rounds (43.9%), oral care for ventilated babies (41.3%), routine bathing (40.4%), and parent involvement in infant care (39.1%), and parent education (37.6%)” (Tubbs-Cooley et al., 2015, p. 817). The data showed less missed nursing care occurs in the NICU setting than in the adult setting, in a variety of nursing care items. For example, Pro re nata (PRN) medication administration was missed 29.5% in the neonatal population versus 80% in timeliness of PRN medication in adults. Furthermore, patient/parent education was missed 80% of the time in the adult setting versus 37.6% of the time in the Neonatal setting (Kalisch, Landstorm et al., 2009; Tubbs-Cooley et. al., 2015).

Instrument

The original MISSCARE Survey (2009) was adapted for this study, with permission, to include pediatric terms. The MISSCARE Survey is a self-identified measure that identifies the amount of missed nursing care occurring in the hospital setting (Kalisch & Williams, 2009). It explores the rationale as to why care is missed in the adult setting. The survey is self-report, requiring nurses to state how often specific assessments and interventions are performed and completed on time. The survey includes three sections. Section A investigates what type of nursing care is being missed. Within section A, there are eight questions about different nursing assessments, twelve questions about nursing interventions (including six about individual care and six about basic care), and three questions about planning care. Section B looks at the reasons why nurses state missed nursing care is occurring. The subsection includes ten questions about possible communication issues. There are numerous questions related to material resources as well as what labor resources are deficient. The third section includes demographic and job satisfaction questions. The results of the survey are scored on a Likert scale “by using a dichotomous scale of no missed care and a positive response of missed care, which included ‘occasionally’, ‘frequently’, ‘and always’ for reported percentages” (Kalisch & Williams., 2009, p. 4). Always missed is the highest score in the Likert scale, and rarely missed if the lowest score (Kalisch & Williams, 2009).

Based on a literature review of the MISSCARE-Survey (Kalisch & Williams, 2009) and the pediatric population, information on what makes the pediatric patient unique and complex from different subsets of the general population was discovered. Due to the research of the

literature, pediatric terms were created to modify and create a pediatric version of the MISSCARE-Survey. The pediatric terms were then reviewed by four committee members to create the Expert Panel Survey. The Expert Panel Survey was then completed by 10 nurse experts, the expert panel, to determine content validity (CV). The validity study determined if the pediatric terms were essential to the population (Gilbert & Prion, 2016a). The results from the expert panel were used, along with the literature, to develop the MISSCARE-Pediatric Survey (Díaz et al., 2018).

The new MISSCARE-Pediatric Survey (Díaz et al., 2018), section A includes questions about how often care is done correctly (within the ordered time or in line with hospital policy). The scale for section A is a Likert scale including the options: “never missed,” “rarely missed,” “occasionally missed,” “frequently missed,” “always missed,” and “not applicable.” Section B includes questions about why missed care occurs including: lack of material resources, lack of labor resources, or communication breakdown. The scale for section B is a Likert scale including the options “significant factor”, “moderate factor”, “minor factor”, and “not a reason for unmet care.” .The third section includes demographic questions including the eligibility question (How long have you worked as a registered nurse [RN] in pediatrics?), to determine that the pediatric experts have five or more years in the pediatric setting.

Methods

Sample

The study included a sample of 10 pediatric nursing experts that reported working as a pediatric nurse for over five years. The 10 experts served as the Content Evaluation Panel. This panel determined the content validity of the added pediatric terms. The panel also determined what terms from the original MISSCARE Survey (2009) were not essential to the pediatric setting. According to Gilbert and Prion (2016b), five to 10 content experts is preferred when applying an survey to a new population. Lynn Theory states that five content experts are needed to determine that a pediatric term is valid (Rudolf & McCarron, 2011). Inclusion criteria of the Content Evaluation Panel was included in the demographic part of the survey, (How many years have you been an RN in pediatrics?).

The Expert Panel and the participants for the MISSCARE-Pediatric Survey (Díaz et al., 2018) demographics included personal, work, and unit characteristics. Participants in the Expert Panel Survey (n = 10) had an average work experience of 15.8 years as a pediatric nurse. The experts were all female; six experts had a bachelor's degree and the other three had some type of higher education. The pediatric experts worked in a variety of shifts differing between night and days and 8- to 12-hour shifts. Eight of the experts reported currently working in the pediatric setting. Out of these eight, five worked in the post-anesthetic care unit (PACU) and three worked on a pediatric step-down unit. Furthermore, the race of the experts ranged from White Non-Hispanic to Black Non-Hispanic, Multi-Racial, and White Native American.

Procedures

This study was conducted using voluntary and confidential surveys. No identifiable factors were collected. Following Institutional Review Board (IRB approval), the Expert Panel Survey, was sent out to 10 nursing experts via personal emails and through a link to the survey on Qualtrics® (Qualtrics, Provo, UT). The experts were identified by personal reference and approved based on inclusion criteria of five or more years as a pediatric nurse. Emails were attained by word of mouth. The pediatric experts were to rate the terms on a Likert scale as “essential,” “useful,” or “not necessary”, only items considered essential by ninety percent of participants were included in the MISSCARE-Pediatric Survey (Gilbert & Prion, 2016a).

Content Validity

The MISSCARE Survey was modified based on the responses from the expert panel to create the MISSCARE-Pediatric Survey (Díaz et al., 2018). Content Validity Index (CVI) was determined when the expert panel determined that the items were linear across pediatric nursing. Meaning the items were understood as intended by the researchers and that they captured the essential parts of pediatric nursing practice (Vadlin, Aslund, & Nilsson, 2015). CV was determined by calculating the content validity ratio (CVR) for every individual item. If the CVR > 0.78 , meaning more than 90% of participants determining it to be essential to the pediatric population, the item was included in the MISSCARE-Pediatric Survey. The CVI was determined by taking the mean of the CVR to determine the content validity of the overall survey (Gilbert & Prion, 2016b).

Results

The results of the Expert Panel Survey resulted in the deletion of 7 questions from section A, of the survey and 13 from section B resulting in the creation of the MISSCARE-Pediatric Survey (Díaz, Kalisch, & Baker, 2018). Table 1 shows what items were deleted. The CVR of the items is also represented.

The MISSCARE-Pediatric Survey (Díaz et al., 2018) had a CVI of 0.9, determining the survey includes essential items related to the pediatric population as determined by the Expert Panelist (Gilbert & Prion, 2016a). The completed survey includes 18 questions in section A (Types of Missed Nursing Care), 28 questions in section B (Reasons for Missed Nursing Care), and 9 questions in Demographics.

Table 1: Deleted Items from the Expert Panel Survey

Types of Missed Care (Items Deleted)		
Assessment	CVR	N
Assessing parents ability to monitor intake/output (e.g. weight diapers, hat, urinal)	-0.6	10
Focused reassessment according to patient	0.6	10
Interventions-Individual Need		
PRN medication requests acted on within 5 minutes	0.4	10
Assist with toileting needs within 5 minutes of request	0.6	10
Teach parents the proper way to assist patients (e.g. bed pan, urinal)	0.2	10
Interventions- Basic Care		
Setting up meals for patient to feed themselves or family members to feed the patient	0.1	10
Planning		
Patient and/or family teaching	1	10
Attend interdisciplinary care conferences whenever held	0.4	10

Reasons for Missed Nursing Care (Items Deleted)		
Communication	CVR	N
Lack of back up support from team members	0.4	10
High number of inexperienced staff on the shift	-0.2	10
Tensions or communication breakdown within the nursing team	0.6	10
The method of making patient assignments	0.4	10
Inadequate hand-off from previous shift or sending unit	0.4	10
Other departments did not provide the care needed	0.2	10
Caregiver off unit or unavailable	0.2	10
Tension or communication breakdown with caregiver	0.4	10
Material Resources	no deletions	
Labor Resources		
Unexpected rise in patient volume and/ or acuity on the unit	0.6	10
Level of staffing	0.6	10
Inadequate number of assistive personnel (e.g. nursing assistant, techs, etc.)	0.6	10

Discussion

The MISSCARE-Pediatric Survey (Díaz et al., 2018) can be used to determine what types of nursing care are not being completed, to the highest quality of care. Future research can utilize the survey to determine how much missed nursing care is occurring in the pediatric setting and the reasons why the missed nursing care is occurring. Further research should also focus on what types of interventions can be used to decrease missed care, in order to increase the quality of care for the pediatric population when they are in the hospital.

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