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Medication Adherence for Foster Children from the Perspective of Foster Care Providers

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This is to certify that the doctoral dissertation by

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Abstract

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MBA, Colorado Technical University, 2011

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Abstract

In 2015, over 427,000 children were in foster care and the largest population were in California's system. Of those children, more than 9,400 were prescribed psychotropic medications. Increases of psychotropic medication use have led to investigations and findings of medication oversights in foster care. Medication oversights included medication nonadherence, which was linked to an increase of problematic behaviors in foster children. The purpose of this phenomenological study was to explore the issues of medication adherence for foster care providers who care for foster children of mild to chronic health concerns who were prescribed medications and experienced multiple placements. By utilizing the health belief model as a guide to formulate the research question and interview questions, an understanding of how the beliefs, attitudes, and behaviors of foster care providers were impacting proper medication adherence behaviors began to manifest. Data gathered through semistructured interviews of foster care providers were analyzed to code and identify themes. The results of this phenomenological study revealed the perceptions, beliefs, and attitudes of foster care providers related to medication adherence behaviors. Multiple barriers to medication adherence for foster children included systemic interferences, limited health information, limited knowledge regarding medications and medication side effects, and child refusal. These findings may be used to create educational trainings, inform policymakers, and develop regulations for medication use in foster care, which could bring about positive change by increasing the potential for better health outcomes for foster children.

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Dedication

I dedicate this dissertation to the friends and family of Gabriel Myers. Gabriel was a 7-year-old child who took his own life while in foster care. During his time while in foster care, Gabriel experienced many atrocities, which included poor medication adherence and psychotropic medication oversights.

Along with Gabriel, I would like to dedicate this study to Steven Ungast, Jo Angel Rodriguez, and other children who have met their fate while in foster care due to medication oversights. It is for these children's stories that I have passionately advocated for this research study to be completed. I promise I will do my part in advocating for change in the foster care system regarding medication adherence and oversights. I will not let the death of these children and the pain the families have endured go unanswered. Change is the process that leads to the purpose. Your deaths were not in vain and you will not be forgotten.

I would also like to dedicate this work to my children. You all have given me the drive and determination to fulfill my dreams in becoming Dr. Boyd. I wanted to be the example, not the excuse. I set the bar high because I know you have the ability to surpass it. I pray that you will always advocate for yourself and others. Change is key.

Acknowledgments

The success of one comes after the failure of many. I would first like to give honor to the Lord, my savior, Jesus Christ. It is within my faith that I have found the passion, dedication, guidance, and strength to complete this research study and to be of service to others. May God receive the glory. I would like to give a huge thanks to Dr. Anthony Perry for taking the time to listen and understand my dissertation topic during the dissertation intensive. Thank you!! I would also like to thank my committee members Dr. Leann Stadtlander and Dr. Wayne Wallace for their hard work, guidance, and commitment in making this dream of completing the dissertation complete.

To my wonderful children, I'd like to thank you for being patient and encouraging through this process. I hope my light helps to guide your direction. I'm also grateful to my parents for providing me the resilience, tenacity, drive, endurance, and competitive skills that you've bread into my blood. And most of all, the love of God you've seared into my life. If it were not for the two of you, I would not be the woman I am today.

I would like to give a special thank you to my family and friends, Michael Carter, Jessica Roldan-Heredia, my aunt Dollie (RIP), Trasie Johnson, aunt Elizabeth Stewart, and aunt Patricia Richardson for your prayers, love, and faith in my endeavors. You have no idea how your kind words and encouragement helped me along this tedious journey.

To Dr. Arcella Trimble who encouraged me to press through this task and listened to me whine and complain about the process, thank you!! To Antoinette Newman who stayed on the phone for hours reviewing articles and listened to me whine, a huge Thank You!! I thank and love you all!!!

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Chapter 1: Introduction to the Study

Introduction

According to the American Academy of Child & Adolescent Psychiatry (AACAP; 2012), psychotropic medication use among children is cautioned by physicians and professionals due to the limited knowledge in the use among developing children and the risk of harm that may arise when the medication is not properly prescribed and monitored. Reports by the Adoption and Foster Care Analysis and Reporting System (2016) reveal a rise in children entering into the foster care system, an approximate 9% increase between the years 2011 and 2015. According to the Adoption and Foster Care Analysis and Reporting System (2016) report, there were more than 427,000 children in foster care during 2015. California has the largest population of foster children and reported almost 12% of their 79,000 foster children were receiving psychotropic medications in 2014–2015 (California State Auditor, 2016). The deaths of some foster children have been linked to components of medication nonadherence or medication oversight within the past 10 years (Conradi, 2016; Hornstein, 2014; Norton, 2012).

Multiple researchers, physicians, and other reporters have indicated a rise in psychotropic medication use and problematic polypharmacy for children in foster care (Alavi & Calleja, 2012; Brenner, Southerland, Burns, Wagner, & Farmer, 2014; Foltz & Huefner, 2013). Due to these concerns, the U.S. Government Accountability Office (GAO; 2014) conducted investigations that found medication overprescribing and oversights in the foster care system. Oversight issues can include medication nonadherence behaviors of foster care providers. Furthermore, doctors promote proper

medication adherence because nonadherence has the potential to increase problematic behaviors or harm to the child (Demonceau et al., 2013; McQuaid et al., 2012; Vasbinder et al., 2016). Problematic behaviors increase the risk of a child to experience multiple placements and further emotional harm (Collazo, 2013; Hancock, 2015; Hernandez-Mekonnen, 2012; Jones, 2013). The rise of children entering foster care along with a rise in psychotropic medication use and medication oversight among children in foster care increases the chances for a child to be subjected to nonadherence behaviors and substantiates the need to understand the issues of medication adherence among this population of children (Alavi & Calleja, 2012; Foltz & Huefner, 2013; Mackie et al., 2011).

Proper medication adherence improves the chances that a child will receive optimal effects of the medication (Aylward et al., 2015; Jimmy & Jose, 2011). Medication nonadherence behaviors can prevent the child from obtaining the desired effects of the medication and can lead to harm or even death (AACAP, 2012; Aylward et al., 2015; Cummings, 2012; Norton, 2012). In this study, I focused on the issues of medication adherence from the perspective of foster care providers who care for foster children with mild to chronic health concerns who were prescribed medications and had experienced multiple placements.

In Chapter 1, I provide background information regarding medication adherence, nonadherence, issues surrounding the use of psychotropic medications with children, and how the problems of nonadherence can harm children. In the background section, I summarize some of the problems of medication adherence as experienced by parents,

children, and professionals, which reveals the gap of knowledge in this area of research. In this chapter, the qualitative nature of the study is described along with the theoretical framework, which is then related research question to be addressed. Definitions of terminology utilized in this study are given to provide a clear and concise understanding of terms. Assumptions, boundaries of the study, limitations, and the significance of the study are also addressed in this chapter.

Background

Many children in foster care are diagnosed with mild to chronic health concerns that require medications (Alavi & Calleja, 2012; Chasnoff, Wells, & King, 2015; Warner, Song, & Pottick, 2014). Statistics show there has been an increase in psychotropic medication use among children in foster care that increases the possibility of a child experiencing poor medication adherence behaviors (Foltz & Huefner, 2013; Warner et al., 2014). Although nonadherence can lead to the harm of children, one well-documented case portrayed how nonadherence of medications led to the death of a child in foster care (Conradi, 2016; Cummings, 2012; Norton, 2012).

Some of the problems experienced by biological parents and their children with regards to medication adherence include forgetting to take medications, children resisting medications because of taste or side effects, and complicated medication regimens that interfere with everyday routines (Brinkman et al., 2012; Gajria et al., 2014; McGrady, Brown, & Pai, 2015). Both researchers and professionals have indicated how the lack of medication adherence or what is known as *nonadherence* of medications can lead to the harm of the child (Demonceau et al., 2013; McQuaid et al., 2012; Vasbinder et al., 2016).

Previous studies have indicated that barriers to medication adherence were linked to the perceptions, beliefs, attitudes, and behaviors of the biological parents (Armstrong et al., 2014; Barnett, Boucher, Neubauer, & Carpenter-Song, 2016a; McQuaid et al., 2012). To date, there have been no studies conducted that focus on medication adherence for children in foster care from the perspective of foster care providers. It is essential to understand if foster care providers present the same or similar perceptions, beliefs, and attitudes toward medication adherence to conceptualize how these variables motivate positive or negative behaviors.

Problem Statement

The problems examined in this study were the issues of medication adherence for foster care children with mild to chronic health concerns who have encountered placement instability. Adherence is defined as the ability of the patient to execute health behaviors that positively follow an agreed upon health care plan between the patient and his or her care provider (Sabaté, 2003; Salvo & Cannon-Breland, 2015). Multiple placements or placement instability has led to increased health risks; long-term effects on foster children, such as substance abuse and risky behaviors; and depression (Hancock, 2015; Longhofer, Floersch, & Okpych, 2011; Stott, 2011). The foster care provider plays a prominent role in medication adherence for foster care youth and pediatric patients; therefore, the cognition and behavior of the caregiver is important to understand (Schneiderman, Smith, & Palinkas, 2012).

Researchers have identified several variables that impede medication adherence for children and youth from the perspective of the biological parents, physicians, and the

children themselves, including: the attitudes and beliefs of the parent regarding medications, parenting stress, lack of training or education, treatment refusal, adverse side effects, complex regiments, socioeconomic status, and self-stigma of the child (Armstrong et al, 2014; Bai et al., 2015; Chong, Aslani & Chen, 2013; DeMore et al., 2012; Pappadopulos et al., 2011). According to Nagae, Nake, Honda, Ozawa, and Hanada (2015), factors that contribute to adherence have not been studied in the child and adolescent psychiatry field. Furthermore, there are no extant studies that focus on the foster care provider's perspective regarding medication adherence for children who are both prescribed medications and have encountered multiple placements while in foster care.

Research supports the fact that nonadherence of medications presents barriers to achieving pharmacotherapy benefits (Demonceau et al., 2013; Solchany, 2012). Problems, such as behavioral issues, conduct problems, learning problems, and impulsivity-hyperactivity problems, have been related to the lack of medication adherence among children who are diagnosed with mild to chronic health concerns (Alavi & Calleja, 2012; Chappell, 2015; Malee et al., 2011). Researchers have also shown that children who exhibit negative behavioral issues are often removed from the foster placement home and continue to experience multiple placements (Foltz & Huefner, 2013; Hernandez-Mekonnen, 2012). Nonadherence behaviors can ultimately lead to a child's removal from their foster care placement and cause them to experience multiple placements, which is a growing concern among children in foster care due to the negative

impact on long-term cognitive and behavioral functioning (Hancock, 2015; Koh, Rolock, Cross, & Eblen-Manning, 2014; Stott, 2012).

Purpose of the Study

The purpose of this qualitative, phenomenological research study was to explore the issues of medication adherence from the view of the foster care parent. Issues of medication adherence have become a phenomenon because they are experienced by many foster children who are diagnosed with mild to chronic health concern (Armstrong et al., 2014; Logan et al., 2014; Vasbinder et al., 2016). The concept of this phenomenon surrounds the ability of the child's parent or foster care provider to adequately administer medications, monitor medications, complete follow-up visits, and properly report to the prescriber. With this study, I aimed to provide insight into the possible issues that could impede the foster care provider's ability to properly adhere to the prescriber's recommendations and understand what experiences trigger positive or negative medication adherence behaviors in foster care providers.

This study addressed the following research question: What are the experiences of foster care providers regarding medication adherence for foster children after the child has been removed from a previous caregiver? I answered this question by using a qualitative approach framed by the health belief model (HBM). Using a qualitative approach captured the individual experiences of the foster care providers. In the following section, I will describe how the HBM relates to this study and the research question.

Theoretical Framework

The conceptual framework for this study was guided by the HBM, which was originated by Hochbaum, Rosenstock, and Kegels (1952). The HBM comprises the six constructs of perceived seriousness, perceived susceptibility, perceived benefits, perceived barriers, cues to action, and self-efficacy to analyze the perceptions, attitudes, and beliefs of a person in order to conceptualize how they may present a positive or negative behavior to a health concern (Yue, Li, Weilin, & Bin, 2015). For instance, if a child who is diagnosed with attention deficit hyperactivity disorder (ADHD) and is prescribed psychotropic medications begins to present positive behaviors, the parent may discontinue the medication (although the prescribing doctor has advised against abruptly discontinuing the medication) because it is believed that the medication is no longer needed (i.e., perceived benefits). Researchers have noted that the unauthorized discontinuance of medications can activate side effects or cause harm to a child (McGuire et al., 2016; Southammakosane & Schmitz, 2015). I will provide more explanations and examples of the HBM in Chapter 2.

In this study, I employed a qualitative approach while maintaining a phenomenological inquiry. The HBM provided the structure needed to frame the interview questions, and the participants' responses to those questions were then analyzed and applied to the research question. By integrating the six constructs of the HBM into semistructured interview questions, I captured the lived experiences of foster care providers who cared for children with mild to chronic health concerns. These experiences were important to capture because they relate to the central question regarding

medication adherence for foster care children from the perspective of the foster care providers.

Nature of the Study

In this qualitative study, I used a phenomenological approach to explore the experiences of foster care providers. The phenomenological inquiry is a method used by researchers to capture the perceptions or interpretations of a specific situation or event (Wertz, 2005). In this study, I captured the foster care providers' interpretations of medication adherence issues for the children in their care. The phenomenological approach is known to provide insight into the essence of the lived experiences of the participant (Grossoehme, 2014). This approach was chosen for this study because it allowed for an exploration of the experiences of foster care providers who care for children with mild to chronic health concerns or diagnosis that are taking medications and have experienced multiple placements.

The phenomena addressed in this study were the issues surrounding medication adherence for children in foster care who had experienced placement instability. The data for this study were obtained by conducting semistructured interviews of foster care providers. Once data were gathered and transcribed, I processed the information through the NVivo 11-12 Pro qualitative data analysis system.

Definitions

Appropriate polypharmacy: The use of multiple medications to manage chronic or a series of conditions according to the best evidence in practice (Duerden et al., 2013).

Foster care provider: The type of placement (i.e., nonrelative family home, group home, or relative home) and relationship (i.e., nonrelated or biological association) an individual has with a child depicts the terminology associated to the person caring for the child (Font, 2014). The terminologies commonly associated with a nonrelative caregiver are *foster parent, foster caregiver,* and *foster care provider* (Font, 2014). A *foster parent, foster caregiver,* or *foster care provider* is a person who is not biologically related to the child but is licensed by a local agency or county and given the authority to care for children who are wards of the state (Font, 2014). The two terms *foster parent* and *foster care provider* were used interchangeably in this study. The biological, relative caregivers are known as kinship caregivers who can also obtain a license to care for their relative's children (Font, 2014).

Health & Education Passport: The Health Passport provides information about the child's health history and education records (Department of Family & Children's Services, 2013). It includes immunization, diagnosis, parent history, and reports about behaviors. The Health & Education Passport informs both the foster care provider and the doctor of background information regarding the development and health history of the child.

Medication adherence: "The extent to which a person's behavior – taking medication, following a diet, and executing lifestyle changes, corresponds with agreed recommendations from a healthcare provider" (Sabaté, 2003, p. 3). Medication adherence also includes the ability of the patient to execute health behaviors that positively follow an agreed upon health care plan between the patient and his or her care provider.

Mild to chronic health concern: Any diagnosis that may include both medical and mental health diagnosis. According to Sabaté (2003), a chronic disease includes any condition that is permanent; creates a type of disability; permanently affects the pathology of the person; requires the person to obtain education or training for rehabilitation; and may require long-term supervision, monitoring, or aid.

Polypharmacy: The use of multiple medications concurrently (Duerden, Avery, & Payne, 2013).

Problematic polypharmacy: Inappropriate prescribing or usage of multiple medications, and the continued use of multiple medications that does not gain the intended benefit (Duerden et al., 2013).

Assumptions

In this study, I relied on the credibility of individuals who cared for foster children of mild to chronic health concerns. It was assumed that the participants of this study were foster care providers, the children had sustained mild to chronic health concerns were receiving medications for their health concerns and had encountered multiple placements, and that each case was awarded in California, which were the requirements for inclusion in this study. All participants were assured of anonymity and confidentiality prior to engaging in the interview process.

By providing anonymity, open-ended questions, encouraging participants to speak freely, and reviewing their responses with each participant prior to ending the interview, I assumed that the data gathered were accurate and useful for this study. It was also assumed that all statements made during the interview process were truthful and

forthcoming assertions as experienced by each participant. Finally, I assumed that 10–15 participants would generate enough information to bring about saturation. These assumptions are vital to the validity and meaningfulness of the study.

Scope and Delimitations

Medication adherence issues are a concern for all children who experience mild to chronic health conditions. Children in foster care are at risk of experiencing a range of medical and mental health issues, and as a result, these children have become the focus of many research studies regarding medication interventions, lack of knowledge regarding psychotropic use among children, medication adherence, and systemic issues regarding proper management of psychotropic medications. The rise of concern regarding an increased use of psychotropic medication use among foster children and the lack of information pertaining to medication adherence in foster care led to the development of this study.

Between the years 2014–2015, California was reported to hold the largest population of foster children in one state (Howle, 2016). The parameters of inclusion to this study included foster parents who were caring for children of mild to chronic health concerns that were prescribed medications for these concerns and had experienced placement instability. Additionally, it was important that the foster child of focus to have met the minimum requirement of 3 months in the current placement. This allowed time for the child to adjust and the foster parent to demonstrate medication adherence behaviors. All other foster parents or biological parents were excluded.

The HBM comprises six concepts in its theory, which allows the researcher the ability to conceptualize how beliefs, attitudes, and perceptions stimulate positive or negative health behaviors (Montanaro & Bryan, 2014). Other theories related to this area of study include the theory of planned behavior, the theory of reasoned action, protection motivation theory, and subjective expected utility theory (Weinstein, 1993). I reviewed the theory of planned behavior for use in this study; however, the HBM theory was chosen because of the two concepts, perceived susceptibility and self-efficacy, which are needed to conceptualize how these variables trigger positive or negative health behaviors (see Montanaro & Bryan, 2014).

Qualitative studies do not use statistical generalizations, and therefore, findings cannot be applied beyond the sample group (Ritchie, Lewis, Nicholls, & Ormston, 2013). However, it is suggested that the transferability of this study may be reached through representational generalization or by the parent population having similar views, experiences, and health behaviors as the sample population (see Ritchie et al., 2013). Issues in representational generalization occur when differences in views, experiences, behaviors, and new phenomenon in the parent population produce new outcomes (Ritchie et al., 2013).

Limitations

The qualitative approach limited this study to the experiences of the participants rather than the quantitative measurement of the variables (see Ritchie et al., 2013). Due to this approach, limitations are found in areas, such as generalization, transferability, and dependability (Ritchie et al., 2013). In this phenomenological study, I relied on the ability

of volunteer foster care providers to report their perceptions, beliefs, and behaviors about a sensitive topic--medication adherence for the foster children in their care. According to the California Department of Social Services and Department of Health Care Services (2014), foster children have the right to health and well-being, and foster providers are to adhere to the recommendations of prescribing doctors. Some participants may have felt reluctant to disclose some of their experiences and/or behaviors due to their duty to comply with the doctor's orders. By refraining from collecting any identifying information of participants, I provided anonymity to help participants feel safe in their ability to disclose experiences that may be perceived as sensitive or nonconforming.

I limited participants in this study to geographical locations in California. These limitations may not allow for generalization of themes to other states. This study was aimed to capture the experiences of foster care children who had encountered several placements to conceptualize how multiple placements may interfere with medication adherence. Therefore, children who had not experienced multiple placements were excluded from this study, which further limits this study.

Using saturation to determine the number of participants is a successful method found in similar research studies and also limits the generalization of this study (Barnett et al., 2016; Charach, Yeung, Volpe, & Goodale, 2014; Dahn, 2013; Lasch et al., 2010). I used saturation, reflexivity, bracketing, and audit trails to account for limits in participants, biases, dependability, and transferability of this study. The results of this study serve as a tool and guide for future research regarding medication adherence or foster care children who suffer from mild to chronic health issues.

Significance

Researchers have shown that biological parents have experienced issues with medication adherence that have negatively impacted their children's health (Armstrong et al., 2014, Bai et al., 2015; Barnett et al., 2016). In this study, I describe the experiences of foster care providers who care for foster children of mild to chronic illnesses in order to conceptualize how the providers' beliefs, attitudes, and perceptions contribute to medication adherence behaviors. Understanding the issues that lead to negative medication adherence behaviors will fill the current gap in the literature and advance knowledge in the health and psychology field.

Potential contributions of this study may help to create better training, education, and intervention programs for parents and children. Due to the highly noted oversight of psychotropic prescriptions for foster children in California and abroad, the results of this study may provide information that will assist in the creation of better practices and/or policies (see Barnett et al., 2016). According to the U.S. GAO, there is a need for states to find better strategies to combat the oversight issues surrounding the oversight of psychotropic medication to children in foster care (Lord, 2014). By improving medication adherence behaviors of foster care providers, children may receive the intended benefits of the prescribed medications, thereby improving their behaviors and health (Demonceau et al., 2013).

Summary

In this chapter, I focused on the medication adherence issues for children with mild to chronic health concerns. Furthermore, I provided a description of the background

to the problems of medication adherence as described by biological parents, children, and doctors. Some of the problems described by biological parents include a reflection of their own health beliefs, attitudes, and behaviors towards medication adherence (Armstrong et al., 2014; Barnett et al., 2016a; Hanghoj & Bosenm, 2013). The problems surrounding medication adherence for biological parents have been well documented; however, there is a lack of information regarding medication adherence issues for foster care providers. Because of the increased use of psychotropic medications, systemic issues regarding oversight of psychotropic medications increase the risk of harming the child. Therefore, it is essential to understand how medication adherence behaviors are managed from the perspective of foster care providers.

Chapter 1 also included a description of how the experiences of foster care providers regarding medication adherence were captured through semistructured interviews framed by the HBM. By capturing these experiences, I aimed to gather information that will help to inform future educational training for foster care providers regarding medication adherence. Furthermore, this study was developed to provide information that may help to form better policies, procedures, and practices surrounding medication oversight in the foster care system.

In Chapter 2, I will review the related, extant research studies and other pertinent literature. The literature review will include topics related to medication adherence and nonadherence, psychotropic medication use among children, and placement instability. An in-depth review of the HBM and how its concepts shaped the research question and interview questions of this qualitative study will also be provided in Chapter 2.

Chapter 2: Literature Review

Introduction

Psychotropic medication oversight, medication adherence issues, and the risks of harm to children are a growing concern (Howle, 2016). California's foster children are prescribed the same psychotropic medications at a higher rate than non-foster children (Howle, 2016). The 427,000 children in foster care in the state are at a higher risk of being introduced to psychotropic medications than non-foster children (Howle, 2016). The problem in this study was medication adherence for children in foster care who experience placement instability from the perspective of foster care providers. The purpose of this study was to gain an understanding of medication adherence issues for foster care providers who care for children that are diagnosed with mild to chronic health issues, are prescribed medications, and have experienced multiple placements while in foster care.

According to Jimmy and Jose (2011), medication adherence is a vital component of successful treatment, and failure to adhere may render serious consequences for children. Researchers have identified medication adherence issues by gathering data from biological parents, children, and professionals (Armstrong et al., 2014; Hanghoj & Bosenm, 2013; Jimmy & Jose, 2011). Doctors have identified changes in foster homes as a barrier to proper medication adherence (Fontanella, Gupta, Hiance-Steelesmith, & Valentine, 2015). Moreover, children who encounter multiple placements are at risk of encountering poor medication adherence behaviors, such as lax monitoring of medications and missed follow-up visits by the foster care provider (Howle, 2016). Due

to the increased use of psychotropic medications, polypharmacy, and the concern regarding psychotropic medication oversight for children in foster care, it was imperative to understand how medication adherence is experienced from the perspective of foster care parents (see Foltz & Huefner, 2013; Fontanella, Hiance, Phillips, Bridge, & Campo, 2014; Harrison, Cluxton-Keller, & Gross, 2012).

In Chapter 2, I provide insight into the HBM, which was used to frame this study and create a path for conceptualizing how the foster care providers' perceptions, attitudes, and beliefs play a role in positive health care behaviors such as medication adherence (see Chen et al., 2011). I also define medication adherence and the variables that lead to positive mediation adherence behaviors. The use of psychotropic medications and polypharmacy treatments among children are areas of concern and are also reviewed in this chapter. In this chapter, I also provide a review of the barriers to medication adherence and nonadherence from the perspective of the prescriber, parents, and children, which is where the gap in the literature is identified.

Literature Search Strategy

For this literature review, I searched online web resources; Google Scholar; online libraries; and databases, including CINAHL, EBSCOhost, MEDLINE, PsycARTICLES, ProQuest, and PsycINFO. Government websites included the U.S. Department of Health and Human Services; Administration for Children and Families; Administration on Children, Youth and Families; and the Children's Bureau. The focus of the literature search was scholarly material published between 2011 to the present. I used the following keywords in my literature searches: *barriers to medications and children, barriers to*

medications and foster children, barriers and psychotropic medications, medication adherence and children, medication adherence and foster care, medication adherence and carer's, nonadherence and children, nonadherence and foster care, psychotropic medication and foster care, psychotropic medication and youth, adherence and foster care, polypharmacy and children, polypharmacy and foster care, placement and foster care, placement stability and foster care, instability in foster care, medication errors and foster care, foster care statistics, and *the health belief model*.

Health Belief Model

The HBM was originally developed by Hochbaum et al. (1952) in the 1950s. The model was used to explain or predict the behaviors of patients by analyzing their attitudes and beliefs (Glanz, Rimer, & Lewis, 2008). The original version of the HBM began with four variables, which included perceived susceptibility, perceived severity, perceived benefits, and barriers (Carpenter, 2010; Glanz et al., 2008). Today, the HBM has evolved and integrated two new variables: cues to action and self-efficacy (Carpenter, 2010; Glanz et al., 2008).

The HBM was modified in 1988 and now includes the self-efficacy construct to conceptualize *perceived barriers,* such as phobias, financial costs, side effects, physical barriers, and accessibility factors (Glanz et al., 2008; Stretcher & Rosenstockm 1997). By integrating the self-efficacy construct with the HBM, the researcher can broaden or delimit barrier dimensions. The HBM can provide insight into what may drive a person to exhibit positive preventative behaviors to health concerns, such as having perceptions of (a) susceptibility to the health concern or the chances of acquiring it; (b) severity, the

concern and consequences are serious; (c) benefits, belief that the action will fix the issue or reduce the seriousness of the problem; (d) barriers, belief that action can be carried out without tangible or psychological defects; (e) cues to action, the person is ready to take action upon demand; and (f) self-efficacy, the belief that the action will be successful (Ingram, Cabral, Hay, Lucas, & Horwooed, 2013; Rosenstock, Strecher, & Becker, 1988).

The HBM is an empirically supported and a widely used model that studies the attitudes and beliefs of individuals in order to predict health behaviors and develop strategies of interventions (Chen et al., 2011; Ingram et al., 2013; Kawakami et al., 2014). Chen et al. (2011) utilized the HBM in their study to determine how the attitudes and beliefs of parents affected their decision to vaccinate their children for influenza. Results showed that parents who believed the vaccination was safe were more than likely to vaccinate their children and that cues to action were affected by the doctor's advice to vaccinate the child for influenza (Chen et al., 2011).

In a qualitative study, Ingram et al. (2013) used the HBM to help understand the help-seeking behaviors of parents who's children may have experienced an acute respiratory tract infection. The researchers focused on the decision-making process for managing medications by parents and looked to identify the triggers or barriers to consulting primary care physicians (Ingram et al., 2013). Results indicated that parent's perceptions of the severity of their child's health concern was shaped by the influence of information gathered from the Internet, friends, and relatives (i.e., cues to action; Ingram et al., 2013). Parents were more likely to consult with the primary care physician

regarding the child's respiratory tract infection after becoming more confident in their belief and perception that a visit to the doctor was necessary (Ingram et al., 2013).

In a cross-sectional research study, the HBM helped Sajadi Hazaveh & Shamsi (2011) to form an understanding of the decision-making skills of mothers whose children were diagnosed with febrile convulsion. By developing a questionnaire focused on the HBM's perceived susceptibility, severity, benefits and barriers, and cues to action, the researchers were able to collect data involving cognitive decision-making skills (Sajadi Hazaveh & Shamsi, 2011). Factors, such as function, awareness, education, and perceived barriers, were significant in determining the mothers' ability to prevent febrile convulsions in their children (Sajadi Hazaveh & Shamsi, 2011).

Similar to previous research studies, in this study I aimed to understand the attitudes, beliefs, and decision-making skills of foster care providers by allowing them to express their experiences with foster children who had encountered multiple placements and were receiving psychotropic medications. In this research study, I utilized the HBM as a tool to understand a foster parent's perceived susceptibility to the health concern of a child, their beliefs about the seriousness of the health concern, beliefs that their actions would reduce the seriousness of the health concern, their perceived barriers to medication adherence, what reminders or other medication adherence strategies are in place to promote positive medication adherence behaviors, and their confidence in taking the necessary actions to positive medication adherence behaviors (i.e., self-efficacy). By implementing the HBM, I determined issues related to medication adherence for foster care parents. By applying the HBM concepts to the experiences of the foster care

providers of children and youth who are prescribed psychotropic medications, insight into the issues related to medication adherence was gained, thereby filling the gap in the literature.

Medication Adherence

As defined by the World Health Organization (WHO), medication adherence is "the extent to which a person's behavior – taking medication, following a diet, and executing lifestyle changes, corresponds with agreed recommendations from a health care provider" (Sabaté, 2003, p. 3). The WHO's definition of medication adherence is used and cited in several peer-reviewed research studies (Brown & Bussell, 2011; Chakrabarti, 2014; Kooshyar, Shoorvaz, Dalir, & Hosseini, 2014). Although some research studies refer to medication adherence as only ingesting a pill, the definition by the WHO renders a more in-depth perspective (Everson-Hock et al., 2012).

Medication adherence has a different meaning from medication compliance. When the patient's behavior is equivalent to the prescriber's advice, the patient is complying, whereas adherence is a collaboration of an agreement between the patient and the physician (Jimmy & Jose, 2011). Adherence begins with communication of both the patient and physician; such communication allows the patient to advise the doctor of personal values, lifestyles, and preferences for care, and in turn, the physician can render an opinion on the best option of medication intervention (Jimmy & Jose, 2011).

In cases where children are involved, the care provider can offer valuable information regarding their views, opinions, and preferences for care. The dynamic process of adherence includes the ability of the physician to assess the patient's

willingness to adhere, advise the patient how to adhere, and follow up with each patient's progress (Sabaté, 2003). Adhering to medication interventions provides children with a path to establishing positive physical, mental, and social behaviors (Demonceau et al., 2013). In this study, I focused on the ability of the foster care provider to positively follow the agreed upon health care plan, which includes proper management of medication and follow-up visits, and communicate any issues related to medications to the prescriber.

Medication Nonadherence Among Children

Many descriptions of nonadherence include, but are not limited to, not filling the medication prescription (i.e., nonfulfillment adherence), nonpersistence (i.e., stopping the drug), and nonconforming (i.e., skipping doses; Jimmy & Jose, 2011). In some instances, nonadherence may be intentional or unintentional. Beliefs, attitudes, and expectations are some reasons why intentional or nonconforming adherence behaviors are presented (Jimmy & Jose, 2011).

Medication regimens must be followed by both the parents and the child in order to avoid compromising healthcare (Chappell, 2015). Nonadherence can result in various consequences, such as increased susceptibility to the disease's effects; a higher rate of trashed medications; a decline in the quality of life; and an increase in hospital interactions, which may include hospital admissions (Jimmy & Jose, 2011). Researchers have noted that discontinuance of medications can increase the risk of triggering the side effects of medications (McGuire et al., 2016; Southammakosane & Schmitz, 2015). Nonadherence, including abrupt discontinuance, has led to the harm and even the death

of children in foster care (Cummings, 2012; Norton, 2012). Stimulants are commonly used to treat children with behavioral issues, including children in foster care (Conradi, 2016). The National Institute on Drug Abuse (2014) reported that stimulants can become addictive and cause withdrawal symptoms and a relapse of health issues as well as increase problematic behaviors if abruptly discontinued. Some psychoactive medications cause irritability, have a negative effect on mood, and decrease impulse control if not properly adhered to or managed (McGuire et al., 2016). For example, Gabriel Myers was a foster child who was initially diagnosed with ADHD and prescribed Adderall (dextroamphetamine-amphetamine), which is a stimulant that may cause mental, mood, or behavioral changes, such as agitation, mood swings, depression, aggression, abnormal thoughts, and thoughts of suicide (Cummings, 2012; Norton, 2012; Southmammakosane & Schmitz, 2015; Stein et al., 2011). After experiencing multiple placements, multiple psychotropic medications, and an abrupt discontinuance of medication (i.e., Adderall & Vynanse) at one point as well as receiving medications that were not approved by the Food and Drug Administration (Symbyax), 7-year-old Gabriel Myers hung himself while in foster care (Conradi, 2016; Cummings, 2012; Norton, 2012).

ADHD, Oppositional Defiant Disorder (ODD), and Conduct Disorder are the most commonly diagnosed behavioral disorders of children in foster care (Linares, Martinez-Martin, & Castellanos, 2013). Researchers have noted the aggressive use of atypical antipsychotics throughout the developmental years of children in foster care which raise concerns due to the lack of knowledge in metabolic risks (Linares et al., 2013). Preschool children are at risk of prolonged use of psychotropic medications if the

treatment is initiated before the age of 4 (dos Reis et al., 2014). There is a concern that children who have early exposure to antipsychotic, antidepressants, and ADHD medications may be at greater risk of experiencing nonadherence behaviors such as abruptly discontinuing medications (dos Reis et al., 2014).

According to Logan et al. (2014) overall medication adherence for children who encounter mental health disorders is poor. The researcher also advises that there is a lack of research regarding medication adherence behaviors among children diagnosed with autism spectrum disorder (ASD; Logan et al., 2014). In the study conducted by Logan et al. (2014) adherence to medications among children diagnosed with ADHD showed that 44% adhered, of the children prescribed antidepressants only 40% were adhering, and of the children prescribed antipsychotics, 52% were adhering. Only 2% of the participants in this study were children in foster care (Logan et al., 2014).

As adolescent children diagnosed with ADHD age, they begin to assume more responsibility for managing their medications (Brinkman et al., 2012). Researchers find that the disorder impacted the child's academics, social relationships, the ability to create, and normal functions of a teenager such as driving (Brinkman et al., 2012). The report noted adolescents not taking the medications because it interfered with their ability to have a social life, feeling that their peers viewed them negatively because they were taking psychotropic medications, forgetting to take the medications, the medications making them feel different or lacking energy, disliking the stigma of the diagnosis such as teachers regarding them as a trouble maker, and side effects (Brinkman et al., 2012).

In a systematic literature review of medication treatment and discontinuance among children diagnosed with ADHD, findings revealed that the majority of children discontinued medications as a result of the adverse effects of the medication (Gajria et al., 2014). Some participants noted complex regimens and social stigmas as a reason for discontinuance of medications (Gajria et al., 2014). Adherence was also affected by the patient's attitude and inconvenience of the medication treatment which often led to the discontinuance of medications (Gajria et al., 2014).

Asthma is a chronic inflammatory disorder that is common among children (Mirsadraee, Gharagozlou, Movahedi, Behniafard, & Nasiri, 2012). Researchers surveyed parents of asthmatic children to understand concerns of nonadherence to treatment. Results showed medication nonadherence was related to issues with cost, a fear of complications such as cardiac arrest, a concern in drug dependency, a belief that that drug would stunt the growth of the child, and parent's expectations that the child would suffer from osteopenia (Mirsadraee et al., 2012). Other issues such as multiple drug regimens, lengthy drug treatments, and various trials of drugs before diagnosis created the largest threat to nonadherence (Mirsadraee et al., 2012).

In a study of children diagnosed with epilepsy, researchers focused on medication-taking behaviors and found that parent's beliefs regarding the medications were one reason children were experiencing non-medication adherence (Aylward et al., 2015). Results also showed almost 15% of the children had stopped taking their medications after 6 months and dosage exceeded its recommendation guidelines by 24% (Aylward et al., 2015). The researchers noted several factors that predicted nonadherence

such as forgetting, pill swallowing difficulties, and beliefs about the effects of the medication which play a role in the initiation, acceptance, and continuance of medicines (Aylward et al., 2015). Limitations of this study included a lack of foster care provider participants. The researchers advise future studies should focus on medication-taking behaviors in adolescents and children with comorbidities.

Small benefits of medications may lead one to believe the medication is no longer needed and therefore discontinuance becomes the behavior and a commonality among non-adhering participants (Chappell, 2015; Gajria et al., 2014; Modi, Rausch, & Glauser, 2011). In a study of child participants, researchers observed persistent nonadherence among 58% of the children who had epilepsy (Modi et al., 2011). The study found that a parent of a child who did not experience a seizure or any type of adverse reaction after missing a dosage would discontinue medications which increases the risk of serious health consequences (Modi et al., 2011). Forgetting to take medications was another indicator of nonadherence in this study and is a commonly noted variable to nonadherence in other studies (Aylward et al., 2015; Chappell, 2015; Modi et al., 2011)

According to Perrin, Anderson, and Van Cleave (2014) chronic health conditions have continued to rise over the past half-century. One of the most common chronic disease among children is Asthma (Vasbinder et al., 2016). Asthma exacerbations are symptoms such as wheezing, coughing, and chest tightening that may include difficulty in breathing (Vasbinder et al., 2016). A case study of a group of children with asthma complications and experiencing a lack of adherence to inhaled corticosteroids showed children who suffered from a higher risk of asthma exacerbations and reduced

susceptibility was associated with nonadherence (Vasbinder et al., 2016). Higher adherence led researchers to believe that children who lacked control of their asthma attacks would feel the need to adhere upon a reaction to the symptoms rather than being proactive and taking their medications prior to the asthma attack (Vasbinder et al., 2016). In other words, children who were not able to control their asthma attacks were found to adhere at a higher rate due to being reactive rather than being proactive. Nonadherence to asthma treatments can also lead to death as reported by Mirsadraee et al. (2012).

Barriers to Medication Adherence Reported by Prescribers

According to Jimmy and Jose (2011), medication adherence barriers include a lack of communication between the patient and provider, limited knowledge regarding proper use and side effects of medications, the disbelief or disregard by the patient for the need of the medication, complicated regimens and durations of administration, and financial issues. Pediatricians report barriers to treating foster children with psychotropic medications as difficult challenges in gaining medical history, multiple layers of authority causing delay in treatment, confidential barriers, lack of funding by organizations in health care, communication gaps between doctors and other decision-makers, and complex health issues of a child which can lead to medication nonadherence (Szilagyi, Rosen, Rubin, & Zlotnik, 2015). Placement changes for children in foster care create barriers to adherence due to changes in prescribers which lead to placement instability, lapse in health care coverage, and limited accessibility to psychiatrist among foster children as noted in a research study of foster children who were diagnosed with schizophrenia and bipolar disorder (Fontanella et al., 2015).

In a recent study, researchers interviewed medical practitioners, mental health providers, and primary care physicians to examine barriers to medication adherence (Chong et al., 2013). Multiple variables contributed to factors related to barriers to medication adherence in this study (Chong et al., 2013). In the first category (patient specific), the participant's beliefs and outer influences provided perceptions that medications were not needed (Chong et al, 2013). The medication-specific category described the side effects of the medications to be the cause of the patient to discontinue medications (Chong et al., 2013). In the final category (environmental-specific issues) the theme included a lack of education regarding the medication treatments and not being able to afford the medications which caused the patient to discontinue the medications (Chong et al., 2013). These barriers all created scenarios related to nonadherence of medications as described previously.

In a study by Mosuro, Malcom, and Guishard-Pine (2014) barriers to medication adherence included a lack of training and communication for caregivers. Some doctors pointed to other factors that may create barriers to medication adherence such as forgetting to administer medications, discontinuance once symptoms decrease or cease, a lack of understanding of instructions provided by the doctor, and discontinuing due to side effects (Chappell, 2015). Self-efficacy is also a factor to consider when focusing on barriers to medication adherence according to Mendys et al. (2014).

Another barrier to medication adherence includes systemic issues such as foster parents having limited access to the history of the child's medical records which creates issues for proper prescribing (Cummings, 2012). The lack of knowledge regarding the

diagnosis of a child could result in problematic polypharmacy (AACAP, 2012). Physicians may become reluctant to discontinue a previously prescribed medication when history regarding the patient is lacking (Cummings, 2012).

Barriers to Medication Adherence Reported by Parents

Medication adherence barriers are often analyzed from the perspective of the biological parent or families which have also provided great insight. In a study of caregivers (biological and adoptive parents) whose children were diagnosed with asthma, it was found that health beliefs present substantial barriers to adherence to the inhaled corticosteroid medications (Armstrong et al., 2014). Negative health beliefs and the ability of the parent to administer medications when the child was resistant correlated with a lack of medication adherence (Armstrong et al., 2014).

Negative beliefs regarding psychotropic medications were also noted as a barrier reported by parents of foster children (Barnett et al., 2016a). Researchers found foster parents were limited in their knowledge regarding the child's medications after the child was placed in their care which led the foster parent to gain knowledge on their own (Barnett et al., 2016a). Many of the children who came into the care of the foster parent were already taking multiple psychotropic medications and some to the tune of four to six medications (Barnett et al., 2016a). The researchers noted five themes during the interview which were lack of knowledge and information regarding the monitoring of the medication, negative attitudes regarding the medications and their lack of self-efficacy, pressures from social workers and doctors to maintain the medications, doubt about the

benefits and side effects of the medications, and poor decision-making skills for the foster parents all led to barriers to medication adherence (Barnett et al., 2016a).

A recent research study focused on children with ADHD in efforts to determine if a psychoeducational intervention program for parents would increase good medication adherence and improve clinical symptoms (Bai et al., 2015). The results showed increased improvement in medication adherence which resulted in lower clinical symptoms (Bai et al., 2015). This study is significant as it points to barriers in initiating and continuing medication interventions among parents of children who had no previous experience in taking or administering drugs. The study found multiple barriers to medication adherence among parents such as not receive training or treatment education, perceiving that there was little emotional support, and experienced feelings of isolation due to their lack of knowledge (Bai et al., 2015). The qualitative approach used during the interviewing of the parents rendered similar medication barrier results such as concerns with side effects regarding growth and development of the child, frequency and duration of medications, and medication regimens as found in previous studies (Bai et al., 2015; McGrady et al., 2015; Mirsadraee et al., 2012).

In a study of Latino children with Asthma, researchers found barriers to medication adherence related to socioeconomic status, family resources, and parental beliefs regarding the necessity of the medications (McQuaid et al., 2012). Although the sample represented an area where barriers lack due to elevated levels of health care coverage, it was found that children continuously failed to adhere (McQuaid et al., 2012). A vast amount of the low adherence rates was a result of the failure by the provider to

prescribe proper medications and a resistance of the parent to fill the prescription (McQuaid et al., 2012). Cultural beliefs also have created barriers to medication adherence for some parents of the Latino population (McQuaid et al., 2012). The author suggested future studies are needed to address barriers to medication adherence that stem from systematic issues and cultural beliefs (McQuaid et al., 2012).

Barriers to Medication Adherence Reported by Children

One of the highest diagnosed health concerns among children in foster care is asthma (Jaudes, Bilaver, & Champagne, 2015). According to Desai and Oppenheimer (2011) asthma has affected 7 million children in the United States and over 10 million children in the world. Although nonadherence can lead to decreased quality of life and even death, nonadherence for children diagnosed with asthma is increasingly high (Desai & Oppenheimer, 2011). As noted in previous studies, medication-related factors and physician-related factors such as complex regimens, medication cost, lack of communications between the physician and patient were also barriers of concern to medication adherence (Desai & Oppenheimer, 2011; Mosuro et al., 2014). Medication adherence responsibilities shifting from the parent to the adolescent have created barriers due to the differences in health beliefs of the adolescents (Desai & Oppenheimer, 2011). Researchers advise that the immaturity or self-regulatory behaviors and lack of knowledge regarding medication adherence led to nonadherence behaviors in adolescents (Desai & Oppenheimer, 2011). Other medication barriers noted in this study included family support, lack of structure in the household regarding medication regimens,

negative attitudes toward taking medications and adolescents wanting to be independent in making decisions regarding drugs (Desai & Oppenheimer, 2011).

Researchers utilized an after-school program to improve adherence in middle school students who were diagnosed with asthma (Patel Shrimali, Hasenbush, Davis Tager, & Magzamen, 2011). Results showed students who admitted to using medication inappropriately changed their nonadherence behavior while participating in the program (Patel Shrimali et al., 2011). The program's success showed that barriers to medication adherence may be found in the lack of support or education in urban areas. The researchers cited previous studies that reflected barriers to medication adherence to be associated with bad taste, lack of education regarding benefits and side effects of medications, financial issues, and negative social feedback (Patel Shrimali et al., 2011). The researchers advised future studies are needed to establish the barriers to adolescents' appropriate medication use specifically in areas where they have no influence (health insurance, transportation, educational interventions, etc.).

Chronic illness and medication adherence barriers among adolescents are a growing concern (Hanghoj & Bosenm, 2013). A review of studies involving adolescents with varying chronic diseases revealed forgetting to take medications and a lack of belief in health benefits created barriers to prescribed medications (Hanghoj & Bosenm, 2013). Adolescent barriers to medication adherence were also associated to social stigmas as noted in other studies (Hanghoj & Bosenm, 2013; McGrady et al., 2015; Patel Shrimali et al., 2011). One study noted the importance of parents and physicians in the decisions to

adhere as many youths are in search of normalcy and complex regimens may interfere with such desire (Hanghoj & Bosenm, 2013).

Children with chronic illnesses such as cancer have also reported barriers to medication adherence (McGrady et al., 2015). Adolescents from a Californian Midwestern Children's Hospital reported believing nonadherence behaviors would not affect their health. They also reported that forgetting to take medications, bad taste, and the side effects of medications were factors that impacted their ability to adhere (McGrady et al., 2015). The decision to take medications was positively influenced by parent support and the adolescent's beliefs that the medication would be beneficial (McGrady et al., 2015). Lack of support such as reminders from parents became a barrier for some participants who lacked support from their parents or significant other (McGrady et al., 2015). Other barriers such as beliefs that skipping the medication would not affect their health, belief that the medication would negatively impact their social life, and not understanding the purpose of the medications (McGrady et al., 2015).

Children infected with HIV have found to have very common barriers to medication adherence such as not remembering to take the medication, not wanting to take the drugs, and not wanting to take medicines that reminded them of the disease (MacDonell, Naar-King, Huszti, & Belzer, 2013). MacDonell et al. (2013) noted common themes such as disliking the the taste of the medication, feeling sick after ingesting medication, running out of the medication, and having a fear of being seen taking the medication and people finding out they were infected with HIV.

Children who experience stressful life events also have nonadherence issues (Malee et al., 2011). Behavioral functioning was studied in children with HIV and results revealed higher than expected outcomes of behavioral impairments in several areas (Malee et al., 2011). The child's inability to follow parents direction regarding medications resulted in nonadherence (Malee et al., 2011). Parents suggested the hyper behavior of their child often led to redirection, and children with conduct disorders needed structure, a consistent routine, and constant monitoring (Malee et al., 2011). Barriers that lead to nonadherence included psychosocial issues and health factors such as conduct problems, learning problems, somatic complaints, impulsivity-hyperactivity, and hyperactivity (Malee et al., 2011).

Psychostimulant medications are commonly used as an intervention for ADHD symptoms such as excessive inattention, impulsivity, and overactivity (Charach et al., 2014). In a study of adolescent ADHD children regarding their attitudes and beliefs of using stimulants, it was found that children's beliefs and attitudes were different from their parent's beliefs (Charach et al., 2014). Some children felt there were minimal benefits of the medications and felt that the medications were negatively affecting their daily routines (Charach et al., 2014). These conflicts weighed heavily in the child's decision-making process which ultimately led to barriers to medication adherence (Charach et al., 2014).

Children who received outpatient therapy for psychiatric disorders was the focus of another adherence study (Nagae et al., 2015). The children, ages 7–17 were coupled with their mothers and asked to complete questionnaires regarding attitudes toward

medications and their understanding of medicine influences (Nagae et al., 2015). Results showed medication adherence significantly correlated with the child's trust in the mother's decision-making skills. Children's medication adherence increased when their mother's perception of the medication results was positive (Nagae et al., 2015). Researchers found barriers to medication adherence were linked to the trust or lack of trust in the parent's attitudes, beliefs, and decision-making skills.

In a study of adolescents who were solid organ transplant recipients, researchers sought to understand the relationships between internalizing symptoms, barriers to medication adherence, and medication adherence (McCormick King et al., 2013). The results revealed barriers such as the ability to adapt to the medication regimen, disorganization or poor planning, prolonged regimens, fear of others knowing about the drugs, not filling the prescription on time, and mismanagement of medicines (McCormick King et al., 2013). These reported barriers by the adolescents often led to delays in administration or complete discontinuance of the drug treatment (McCormick King et al., 2013).

Psychotropic Medication Use in Children and Youth

In a recent study, case files were used to identify foster children with some form of mental diagnosis (Scozzaro & Janikowski, 2015). Findings showed that 59% of the children were diagnosed with a mental illness which is higher than those children not in foster care (Scozzaro & Janikowski, 2015). The findings also showed that placements for children with mental health diagnosis were not different from those children who did not have a mental health diagnosis (Scozzaro & Janikowski, 2015). This study also found

that less than 43% of the children received both behavioral services and psychotropic medications as an intervention (Scozzaro & Janikowski, 2015). The researchers believe that monotherapy may lack the ability to meet the children's needs (Scozzaro & Janikowski, 2015).

Some of the most commonly used psychotropic medications include antipsychotics, antidepressants, and ADHD medications or stimulants and nonstimulants (Logan et al., 2014). The Food and Drug Administration regulates these drugs, other drugs, and the safety of food United States (AACAP, 2012). When drugs are rendered safe for consumption and are effective for a specified diagnosis, the FDA will grant approval for such use (AACAP, 2012). Medications approved by the FDA must follow precise dosage and age range that has previously been proven to be safe through evidence-based research (AACAP, 2012). Those medications that have not been approved by the FDA are considered to be "off label" medication (AACAP, 2012; Solchany, 2012). Treatment of children and youth through the use of "off-label" drugs is a common practice and found to be an ethical means of treatment (AACAP, 2012).

Various psychotropic medications are labeled with FDA Black Box Warnings and require close monitoring when used as a treatment method for children (AACAP, 2012). Psychotropic drugs that are composed of Selective Serotonin Reuptake Inhibitors may present serious side effects and could be life threatening thus the reasoning for the black box warning (AACAP, 2012). It is advised to use caution and adhere to the prescribed dosage of each medication. Medicines containing Selective Serotonin Reuptake Inhibitors can be dangerous if not properly monitored (AACAP, 2012).

Parents are encouraged to work in concert with their physicians and psychiatrist to determine the best plan of action and "safety plan" for their child while "off-label" medication interventions are utilized (AACAP, 2012). It is important to note that "off-label" drugs are an efficient and safe means of intervention while following the guidelines of the prescribing doctors (AACAP, 2012). Although there are many side effects and cautions involved in the use of psychotropic medications among children and youth, the rate of psychotropic prescriptions has increased (Foltz & Huefner, 2013; Warner et al., 2014).

In a recent national study of trends in the mental health care of children, adolescents, and adults by office-based physicians, results showed a significant increase in psychotropic medication visits for youths from 8.35 – 17.12% between 1995 – 1988 and 2007 – 2010 (Olfson, Blanco, Wang, Laje, & Correll, 2014). According to Longhofer, Floersch, and Okpych (2011), psychotropic medications are prescribed to foster care children at a significantly higher rate than children who are not in foster care. Concerns regarding the use of psychotropic medication prescriptions and the use of such medications with foster children are increasing (Alavi & Calleja, 2012; Foltz & Huefner, 2013).

According to Klein, Damiani-Taraba, Koster, Campbell, and Scholz (2015) there more children diagnosed with ADHD in foster care than children in the general population. Researchers conducted a literature regarding ADHD and the guidelines for diagnosis among children in foster care (Klein et al., 2015). Findings have shown high rates of children receiving ADHD diagnosis and high rates of psychotropic medication

prescriptions (Klein et al., 2015). Questionable guidelines regarding the diagnosing of ADHD in children were found due to the limited knowledge about the disorder among children in foster care (Klein et al., 2015). Children in more restrictive types of foster homes such as group homes have higher medication rates and some concerns around the inappropriate use of ADHD medicines were found (Klein et al., 2015).

In a recent analysis, researchers focused on the use of psychotropic medications among children and youth with autism spectrum disorders (ASD). Findings showed that 65% of the children were prescribed psychotropic drugs and were Medicaid participants (Schubart, Camacho, & Leslie, 2014). The report also noted that antipsychotics were the most commonly prescribed medications for children diagnosed with autism and polypharmacy use became a trend (Schubart et al., 2014). Concerns regarding an increase of psychotropic drugs use among children diagnosed with ASD are growing due to the limited amount of information regarding the risk-benefit of the medications (Schubart et al., 2014).

One concern regarding psychotropic medication intervention is its effectiveness without the additional component of psychotherapy (Hinshaw et al., 2015; Soria-Saucedo, Walter, Cabral, England, & Kazis, 2015). Children in foster care often present behavioral and depressive issues that require the aid of pharmacotherapy and psychotherapy (Alavi & Calleja, 2012; Pappadopulos et al., 2011; Warner et al., 2014). Pharmacotherapy interventions have been found to be the first or the only line of defense in treating poor behaviors in children (Alavi & Calleja, 2012; Pappadopulos et al., 2011; Warner et al., 2014). According to Soria-Saucedo et al. (2015) psychotherapy has been

noted as equivalent or as having a greater effect than antidepressant medications in the treatment of depressed youths. Although antipsychotic medications alone or without any form of psychotherapy have become a common form of intervention for the treatment of disruptive behaviors in children and adolescents, practitioners advise against this type of monotherapy (Olfson et al., 2014; Solchany, 2012).

Use of Psychotropic Medications and Foster Care in California

Psychotropic medication use is higher for children in foster care than children who are not in foster care (Howle, 2016). This issue is concerning due to the fact that California has the largest population of children in foster care (Howle, 2016). The California Department of Health Care Services has established a guideline for the use of psychotropic medications for children and youth within the foster care system (DHCS, 2015). According to the state's guidelines, use of psychotropic medications must include psychosocial interventions, and the only exception to this rule account for psychological intervention found to be ineffective (DHCS, 2015). The guidelines set forth by the state are the first comprehensive steps coordinated with the rules and regulations provided by the provisions of Medi-Cal mental health services (DHCS, 2015). Several components of the guideline include a treatment plan, psychiatric evaluation and diagnosis, and guidelines for the prescribers of psychotropic medications (DHCS, 2015).

Under the treatment plan, psychotropic medications must have close monitoring, and the communication should be ongoing throughout the line of responsible parties (DHCS, 2015). Doctors must weigh the overall treatment plan with and without medications, evaluate the side effects, and the provider must consider the impact of

psychosocial development and the child's placement if the drug intervention is not being adhered (DCHS, 2015). Prior to prescribing and administering psychotropic medications to a child in foster care, a court approval must be obtained (DCHS, 2015; Pataki et al., 2016). The prescribing physician must include information as the dosage, prescription plan, and goals of the medication for the child's treatment to the courts (DCHS, 2015). The guidelines are to be discussed and collaborated with the child, family, caregiver, and other responsible parties (DHCS, 2015). Psychotropic medications should not be used as a form of chemical restraint or as a form of discipline, and the child cannot be forced or coerced into taking medication (DHCS, 2015). Reassessment and monitoring of psychotropic medications are an integral component of the treatment plan, and evidence-supported psychotherapeutic treatments must also be reviewed for optimal care results (DHCS, 2015).

Recently, GAO conducted their own study of regarding the oversight of psychotropic medications prescribed to children in foster care (Lord, 2014). A recommendation was made to the Department of Health and Human Services' Administration for Children and Families to provide guidance through the use of managed-care organizations or third parties in order to resolve some of the issues with psychotropic medication prescription oversight (Lord, 2014). Many states have begun utilizing managed-care organizations to help with the oversight issues. However, this study found that some states have made a very limited effort in implementing plans for the oversight use of prescribed drugs in foster care. Although some states have implemented new oversight programs, foster care providers report a lack of monitoring of

psychotropic medications by the prescriber and social workers (Barnett et al., 2016b). California provides children in foster care with psychosocial services through fee-for-service providers, Medi-Cal mental health plans, and other types of Medi-Cal Managed care plans (Howle, 2016).

Polypharmacy is known as having more than one psychotropic medication prescription or one individual concurrently using multiple drugs (AACAP, 2012; Duerden et al., 2013; Kaufman, 2014). Problematic or questionable polypharmacy can occur when multiple medications are inappropriately prescribed, and the intended benefit of the drug is not achieved (Brenner et al., 2014; Duerden, et al., 2013). The Administration on Children, Youth, and Families (2012) indicates a rise of polypharmacy interventions among children and youth in foster care.

Polypharmacy is beneficial when used and adhered to appropriately (Duerden et al., 2013). Appropriate polypharmacy interventions bring about an improved quality of life for individuals who demonstrate consistent adherence (Duerden et al., 2013). Although polypharmacy can render positive effects, doctors raise concern with this practice in children (Leonard, 2012). Several studies note the risk of drug interactions and the increased risk of side effects in polypharmacy interventions when used to treat children and youth (Brenner et al., 2014; Foltz & Huefner, 2013; Leonard, 2012).

A review of the trends in polypharmacy among youth in foster care revealed a lack of safety and efficacy, concerns regarding system oversight and monitoring, and concerns with the use of two or more antipsychotic drugs on children (Barnett et al., 2016b; Fontanella, Warner, Phillips, Bridge, & Campo, 2014). The rate of polypharmacy

use among foster children is increasing and has spread to other states which is an indicator that there is a system-wide oversight with regard to monitoring and quality of care initiatives are needed to improve oversights (Fontanella et al., 2014; Mackie et al., 2011).

A national review revealed that 686,080 children were placed in foster care between 2002 – 2007, and during this period there was an increase of major health diagnosis among children and youth (Rubin, Matone, Haung, Feudtner, & Localio, 2012). Polypharmacy use among foster children varied throughout the country and demonstrated an increase in 18 states between the years 2002 – 2007(Rubin et al., 2012). Reports by the Administration on Children, Youth, and Families (2012) reveals a high percentage of children in foster care are prescribed a combination of three to five classes of psychotropic medications simultaneously (Narendorf, Bertram, & McMillen, 2011).

The AACAP (2012) study demonstrated that having multiple providers creates nonoptimal circumstances which can result in problematic polypharmacy. Although many doctors are concerned about the lack of polypharmacy studies among children, this method of treatment is standard (Leonard, 2012). Doctors advise that poor medication adherence may lead to a high risk of questionable or problematic polypharmacy (Hilt, 2014). Another contributing factor of controversial polypharmacy is the misdiagnosis of children and youth as noted by Narendorf et al. (2011).

Placement Instability in Foster Care

Child Behavioral Issues in Foster Care

Children in foster care are often diagnosed with behavioral problems or health matters that require prescription medications (Chasnoff et al., 2015). Researchers have documented the connections between behavioral problems and multiple placements (Fisher, Stoolmiller, Mannering, Takahashi, & Chamberlain, 2011; Simmel et al., 2012). The common themes among these studies were problematic behaviors, medications, and placement instability. When a child enters a new home, there is a high risk of the introduction of a new prescription drug (Johnson, 2012). Research lacks information regarding how medication adherence is managed during the transition process.

Many children who demonstrate problematic behavioral issues have experienced multiple placements in foster care which have led to long-term effects on emotional development (Font, 2014; Stott, 2012). To date, no studies have provided information linking behavioral issues and nonadherence of medications to placement instability of children in foster care. However, research suggests that nonadherence increases the probability that the child may experience side effects of the medication (Kaufman, 2014). Although there are no studies linking behavioral issues to nonadherence, studies regarding placement disruptions have found a link between behavioral issues and placement instability (Fisher et al., 2011; Koh et al., 2014; McManus, 2012).

A placement disruption takes place when there are negative issues related to the child's behavior and the foster care provider requests a child to be removed (Fisher et al., 2011). Placement instability occurs when foster children experiences multiple placement

due to various reasons which include non-negative or negative factors (Fisher et al., 2011). One nonnegative factor may reflect the removal due to finding an adoptive placement (Fisher et al., 2011).

A study of preschoolers placed in foster care was done to determine if placement disruption can cause problem behaviors (Fisher et al., 2011). Of the 98 children studied, 63 children experienced placement disruptions due to behavioral problems (Fisher et al., 2011). When a child presented a behavioral issue within the first 3 months of placement within the foster home, researchers predicted that the child would be removed from the home within 12 months (Fisher et al., 2011). Behavior problems of children in foster care are also related to integration into foster homes and positive placement with an adoption family (Leathers, Spielfogel, Gleeson, & Rolock, 2012). Researchers found problematic behaviors in children had an impact on their integration to a new foster home and potential adoption homes which raised the risk of the child remaining in foster care (Leathers et al., 2012). Children who were at risk of long-term foster care and received medication therapy early on in placement had a higher chance of finding a permanent placement or adoptive homes (Leathers et al., 2012).

Although many children in foster care are placed in the care of non-relatives, some children are placed with a family member or what is termed, kinship care (Sakai, Lin, & Flores, 2011). Children who are placed in kinship homes due to maltreatment have reported a lower number of behavioral problems than children in non-kinship homes (Sakai et al., 2011). The results of the study show associations of children who are placed in kinship care to lower mental health services and the use of psychotropic medications,

and behavioral issues (Sakai et al., 2011). However, of the 1,308 children studied nationally, it was found that kinship care was associated with a high rate of substance abuse and pregnancy (Sakai et al., 2011).

Children with chronic illnesses while in foster care are at risk of developing depression, delinquent behaviors, and report internalizing and externalizing behaviors (Woods, Farineau, & McWey, 2013). Adolescents in long-term foster care who experienced chronic illness reported significantly more problems with behaviors than children who were not chronically ill (Woods et al., 2013). Of the reported chronic health conditions, asthma was reported more often than other health conditions and was significantly related to adolescents who internalized problems (Woods et al., 2013). Externalizing problems was related to recurring health issues in foster care adolescents which are then linked to delinquency issues (Woods et al., 2013). Collaborations between the social worker and health care system are advised by researchers in order to impede further maltreatment in this population of children (Woods et al., 2013).

Behavioral problems rank high on the list of referrals for professional care (Chasnoff et al., 2015). Foster care providers have a duty to care for children who may present behavioral issues for which they may or may not have been properly trained (Murray, Tarren-Sweeney, & France, 2011). In a study of foster care providers in Europe, participants felt a lack of confidence, isolation, and depression when caring for children who presented demanding behaviors and mood difficulties (Murray et al., 2011). Results also showed that the participants who were reluctant to change, distracted, hyper and displayed demanding attributes which were higher than other foster care providers of

children who did not exhibit these behaviors. A lack of support and knowledge by the social worker was another area that was a concern reported by the foster care providers. As a result of the disruptive behaviors, the foster providers expressed emotional strain which led to the removal of the child (Murray et al., 2011).

The Impact of Placement Instability on Children in Foster Care

Placement instability is defined as having more than two placements within a year or when a child has experienced four or more placements (Jones, 2013; Lynch, Dickerson, Saldana, & Fisher, 2014). Finding permanent placement for a child after being removed from the home is essential to the emotional well-being of the child (Fisher, Mannering, Van Scoyoc, & Graham, 2013). According to Stott (2012), placement instability has led to poor outcomes after the child has aged out of the foster home. A study examined adults after they aged out of the foster-care system and found placement instability increased their risk of substance abuse (Stott, 2012). Results revealed the youth had encountered an average of 8 or more placements before the age of 18 and girls experienced a higher risk of pregnancy (Stott, 2012). Studies have also linked placement instability to attachment issues, emotional and behavioral problems, poor executive functioning, depressive disorders, juvenile delinquency, high pregnancy rates among girls, possible introduction to medications, and poor identity formation and a lack of positive social skills (Fisher et al., 2013; Hancock, 2015; Stott, 2012).

According to Fisher et al. (2013), placement instability is a common experience for foster children. In a review of 59 research studies regarding placement instability, researchers were able to identify an association between multiple placements of children

in foster care and disrupted brain development (Fisher et al., 2013). Foster parents who reported behavioral issues such as oppositional defiance was significantly associated with placement instability (Fisher et al., 2013). The researchers noted relationships between ADHD, negative behaviors, substance abuse, and other psychopathic dysregulations to the rise of psychiatric medication use among children in foster care (Fisher et al., 2013). Furthermore, the study found behavioral problems lead to psychiatric medications, and as a result, the child experienced a placement disruption (Fisher et al., 2013). Finding factors that contribute to poor outcomes of children in foster care is a growing concern according to Fisher et al.

Several studies also have identified patterns of negative issues related to multiple placements for children in foster care (Collazo, 2013; Hancock, 2015; Hernandez-Mekonnen, 2012; Jones, 2013). The risk of experiencing a mental health problem is high for children in foster care (Hancock, 2015). Findings show the number of placements encountered by a child increases the predictability of depressive disorders (Hancock, 2015). Moreover, the more placements a child experiences increases the likeliness of receiving a clinical diagnosis (Hancock, 2015).

A child's social and emotional outcomes are negatively impacted by placement instability (Collazo, 2013). Multiple placements and a history of abuse have an impact on the quality of the relationship between the biological mother and their adolescent children (Collazo, 2013). Findings showed that after the children had experienced multiple placements and maltreatment by the mother, the children's perception of the relationship with their mother was negatively impacted (Collazo, 2013). Maltreatment history

included general neglect, neglect/severe neglect, emotional maltreatment, and physical abuse (Collazo, 2013).

Summary and Conclusions

As the use of psychotropic medications among children increased over the years and the negative effects on children spread across the country, researchers found that the lack of knowledge regarding psychotropic medication use among children raised further concerns which led to the findings of systemic oversights in the foster care system by the GAO (DHCS, 2015; Fisher et al., 2013; Lord, 2014). The systemic oversights in foster care, as in the case of Gabriel Myers, increase the risk of medication nonadherence behaviors which has led to the harm and death of some children in foster care (Conradi, 2016; Lord, 2014). This review presented evidence that there are multiple issues that have prevented biological parents, children, and professionals from demonstrating appropriate medication adherence behaviors (Chong et al., 2013; Hanghoj & Bosenm, 2013; Mirsadraee et al., 2012). Some of the common issues that lead to nonadherence behaviors are linked to negative beliefs, attitudes, and behaviors of both the parent and the child (Brinkman et al., 2012; Desai & Oppenheimer, 2011; Hanghoj & Bosenm, 2013; Patel Shrimali et al., 2011).

The review of various health and medical issues of foster children and medication adherence issues revealed the need to understand how foster care providers experience issues related to medication adherence (Jimmy & Jose, 2011; Vasbinder et al., 2016). To date, no research has captured all aspects of medication adherence issues from the perspective of the foster care provider which includes issues during the transition process

of a foster child from their previous foster home. This study fills the gap and extends the current knowledge regarding medication behaviors by shedding light on medication adherence issues from the perspective of foster care providers who care for foster children that are diagnosed with mild to chronic illnesses and have experienced placement instability. In Chapter 3, I provide a description of the qualitative methods that will guide the selecting of participants, research questions, and data analysis plan. Issues regarding trustworthiness such as credibility, transferability, dependability, and confirmability, and ethical procedures will also be included in Chapter 3.

Chapter 3: Research Method

Introduction

The purpose of this qualitative, phenomenological research study was to gain an understanding of medication adherence issues for foster care providers who care for children that were diagnosed with mild to chronic health issues, prescribed medications, and had experienced multiple placements while in foster care. Medication adherence issues have been experienced by parents of children diagnosed with a mild to chronic illnesses; however, there is limited information from the perspective of foster parents.

In Chapter 3, I provide information regarding the research design, the role of the researcher, methodology, data collection process, and the data analysis. This chapter also includes a discussion of trustworthiness (i.e., credibility, transferability, dependability, and confirmability). In addition, other relevant ethical issues are covered in Chapter 3.

Research Design and Rationale

With this study, I addressed the research question: What are the experiences of foster care providers regarding medication adherence for foster children after the child has been removed from a previous caregiver? This research was qualitative in nature, and I employed a phenomenological design. A phenomenological inquiry allows the researcher to capture the essence of the experiences of the foster parents through the concept of epochés or bracketing (Wertz, 2005). The phenomenological inquiry involves omitting biases through abstentions of scientific and methodological beliefs (Wertz, 2005). By abstaining from influences and incorporating a natural attitude toward the

experiences of the participants, I was able to provide meanings as expressed by the foster care providers (see Wertz, 2005).

The phenomenon of interest, medication adherence for children, is of concern due to the lack of information regarding such experiences from the perception of the foster care provider. Exploring the experience of the foster care providers helped capture the essence of a shared experience, such as those experiences expressed by other parents (i.e., biological) who have encountered barriers to medication adherence (see Armstrong et al., 2014; Barnett et al., 2016a; McQuaid et al., 2012). Furthermore, the experiences expressed by care providers eliminates the lack of knowledge needed to better understand how the perceptions of medications and medication side effects affect medication adherence behaviors.

Previous researchers have applied the phenomenological approach in psychology and health sciences to capture the lived experiences of those participants who are engaged in an ongoing phenomenon (Davidsen, 2013). A phenomenological study is traditionally chosen to provide the researcher with the ability to capture the essence of the lived experiences from the subjective perspective of an individual (Grossoehme, 2014). In this study, I used the phenomenological method to capture the experiences, perceptions, attitudes, beliefs, and behaviors of foster care providers who care for children that are prescribed medications for mild to chronic disorders.

Other methods of inquiry, such as the ethnographic method, would not have benefited this study because I sought to capture the essence of a culture through collectivistic experiences rather than through individual experiences (see Goodyear,

Barela, Jewiss, & Usinger, 2014). If using a grounded inquiry, I would have focused on developing a theory as to why foster care providers may encounter medication adherence issues, which was not what I was seeking to understand in this study (see Goodyear et al., 2014). The case study method of inquiry employs multiple perspectives, which would have gathered more than just the perspective of the foster care provider if used in this study (see Ritchie et al., 2013). The phenomenological inquiry solely focused on the foster parent's experience, and with it I was able to capture the essence of that individual's experience only (see Goodyear et al., 2014).

Role of the Researcher

In a qualitative study, the researcher can be viewed as the author, witness, and/or the central figure to the findings of the study (Willig, 2013). As the researcher or investigator of this study, my role included determining the qualifications of participants, selecting participants, gathering data through semistructured interviews, determining saturation, and analyzing data through thematic analysis (in NVivo) to unveil emerging themes (see Petty, Thomson, & Stew, 2012). Biases were managed by bracketing and reflexivity as noted by Tufford and Newman (2012). I took notes and used a journal during the process of interviewing, collecting and analyzing data, and determining themes.

Methodology

Participation Selection Logic

The study population consisted of both male and female foster care providers who were caring for a foster child at the time of the study who had been in their care for a

minimum of 3 months in the state of California. I captured the foster care providers' experiences after the child became familiar with the foster family and had time to adjust to the new placement; this period is known as the *honeymoon* period (Madden, Maher, McRoy, Peveto, & Stanley, 2012). The target population included children who were currently taking medications for mild and/or chronic health disorders and had experienced more than one foster care placement. It was essential to capture the foster parents' experiences with medication adherence for all ages of foster children that may encounter prescribed medications.

I used purposeful sampling in this study. According to Lasch et al. (2010), purposeful sampling is used in a qualitative study to provide the researcher with the ability to select participants who are representative of experiences rather than representatives of a population. In purposeful sampling, the individual's experiences are the goal, not the understanding of the populations (Lasch et al., 2010). Several research studies of similar focus interviewed between 10 and 15 participants to achieve saturation, which is an appropriate number for a qualitative, phenomenological research study (Barnett et al., 2016; Charach et al., 2014; Dahn, 2013; Lasch et al., 2010). In this study, I continued to gather information until saturation was reached.

I prescreened all participants prior to engaging in the research study. The participants were able to answer yes to all the requirements, including the child is prescribed medications for mild or chronic illness (including asthma medication or any type of psychotropic medication) and has experienced multiple placements as well as the participants reside in California. Participants could be of any age, gender, or ethnicity.

Instrumentation

In a qualitative study, the researcher is ultimately the instrument used to capture the data (Pezalla, 2012). Prior to data collection, I asked each volunteer a few questions to determine if they met the qualifications for this study and to gather demographic information. The itemized qualifying and demographic questions are outlined in Appendix A. Information regarding demographics were gathered to help formulate the categories of groups and themes.

I collected data from the participants via semistructured, recorded interviews and then fully transcribed their responses. The interview questions are outlined in Appendix B. The interview questions were guided by the framework of the HBM. The HBM theorizes that a person, such as a foster parent, must perceive that (a) susceptibility, the child is susceptible to negative impacts of medications due to nonadherence; (b) severity, the diagnosis, symptoms, side effects of the medication, and consequences can be serious; (c) benefits, medication adherence will provide benefits by fixing the issue or reducing the seriousness to the child's health concern; (d) barriers, belief that proper medication adherence behaviors can be carried out without tangible or psychological interferences to the child or foster care provider; (e) cues to action, the ability to recognize symptoms of the disorder, side effects of medications, and nonadherence behaviors and act accordingly; and utilize (f) self-efficacy, the ability to feel self-efficacious or competent in demonstrating successful medication adherence behaviors for the children in their care (Fulton et al., 1991; Ingram et al., 2013; Rosenstock et al., 1988). Previous researchers have utilized the HBM concepts to structure interview

questions that have provided adequate data results to answer the target research questions (Chen et al., 2011; Ingram et al., 2013; Sajadi Hazaveh & Shamsi, 2011). By utilizing the HBM to guide the interview questions, I was be able to gather sufficient information to answer the research question.

Procedures for Recruitment and Participation

Foster care providers are required to complete training courses prior to having a child placed in their home, and follow-up training hours are required annually to maintain licensure (Greeno et al., 2015; Mersky, Topitzes, Janczewski, & Mcneil, 2015; Nash & Flynn, 2016). Recruitment letters were made available at affiliates of the offices of the two counties where the study took place where foster care provider classes are held, at foster care agencies, and where foster parents are present. Finally, the recruitment flyers were uploaded and shared on Facebook pages and on Walden University's Participant Pool for Research Studies website.

I provided anonymity to protect the identity of participants, which allowed the participants the freedom to provide honest answers to the interview questions. Participants were advised of steps taken to provide anonymity, which included the use of a blocked caller ID cell phone, a temporary Google phone number and e-mail that will be deleted upon completion of the study, and the omission of identifying information from this study. Once the participant contacted me by calling the number located on the recruitment letter and agreed to continue with the interview, they were required to provide the identification number located on the recruitment letter. Each recruitment letter has an identification number for the purpose of anonymity. The identification

number was linked to the temporary Google e-mail address. Upon completion of the interview, the participant was provided with a temporary Google e-mail address and password. No follow-up e-mail questions were needed during the data collection process.

The Google e-mail accounts were deleted upon completion of the research study. If the participant could not access e-mails, they were asked to call me on the number provided in the recruitment letter. If the participant had lost the recruitment letter, letters were available at desired sites. The recruitment letter included the purpose of the study, information regarding anonymity, the consent form, and a short biography of me in efforts to help the participant to feel safe in participating.

I collected data while implementing the bracketing technique. Bracketing is a method used to omit biases and is demonstrated by setting aside preconceptions and abstaining from previous emotions and experiences that may obscure the data (Tufford & Newman, 2012). According to Tufford and Newman (2012), bracketing helps to bring to light preconceptions and biases that may influence the narratives. Prior to data collection, I conducted self-analyzations for biases by answering the interview questions, then determined how to refrain from guiding the participants during interviews. While creating interview questions, during interviews, and when determining themes formed during the analysis process, I used the bracketing technique to increase reflexivity.

A debriefing session concluded each interview, which allowed the participant to ask any questions and express any concerns. I also provided a brief summary of the interview, which allowed the participant the ability to clear up any misconceptions. A few of the participants were able to clarify some misconceptions, and adjustments to

those answers were made. While the conversations were still fresh in memory, it was important to clarify any ambiguous information (Ranney et al., 2015). Finally, I e-mailed a thank you note to each participant for their time and participation in this study.

Data Analysis Plan

The HBM provided me with a means to formulate questions to capture the lived experiences of foster care providers. After completion of the interviews, the gathered data were analyzed to determine themes regarding the beliefs and attitudes of how foster care providers perceived the susceptibility of the child's health condition, seriousness of the child's health issue, benefits of medication adherence, barriers to adherence, their own self-efficacy, and what caused them to act when nonadherence becomes the behavior.

Upon saturation, I fully transcribed, anonymized, and rechecked all information gathered from the interviews. By using the thematic analysis process and constant comparison technique, I closely inspected the data for themes (see Braun & Clarke, 2006; Wahyuni, 2012). Next, the data were transferred into the NVivo 11-12 Pro software where analysis continued. The text was then coded as words or phrases and grouped into meaning units (see Grossoehme, 2014). Categories were developed according to the themes identified. It is at this point where the meaning of the captured experiences was derived from thematic statements and the phenomenon begin to be realized. Discrepancies found during the analyzation process are noted in the discrepancy area of Chapter 4.

Issues of Trustworthiness

The trustworthiness of a qualitative study is assessed through validating the credibility (internal validity), transferability (external validity), dependability (reliably), and confirmability (objectivity) of the study (Shenton, 2004). The credibility or internal validity is found when the study actually portrays the experience of the phenomenon (Grossoehme, 2014). By utilizing the concepts of the HBM to develop semistructured interview questions, the I was able to address the research question which established the credibility of the interview questions. Saturation and reflexivity was used to ensure credibility. Saturation or consensual validity is achieved when there are no new themes emerging from the participant's interviews (Ingram et al., 2013).

Transferability or external validity is the ability of the research study to be applied to other situations of the same context (Shenton, 2004). Thick descriptions was used when describing participant selection and detailed descriptions throughout the methodology section. Documents such as notes, transcripts, and direct quotes from the participants are provided to allow the reader the ability to determine the transferability of this study to other settings.

Dependability of a study relies on the ability of the study to render the same results if it were repeated with the same participants (Shenton, 2004). Issues with dependability arise in qualitative phenomenological studies due to the natural changes that occur in life and the changing perceptions of the participants (Shenton, 2004). To remedy issues with dependability, a decision trail of the original research providing the

purpose of the study, method of participant selection, data collection strategy, and analysis process are provided (Thomas & Magilvy, 2011).

Confirmability has been established by providing evidence that results were obtained through the gathering of the participant's experiences rather than through the preconceived notion of the researcher (Shenton, 2004). Reflexivity was utilized to maintain self-evaluation of position and to consistently remain aware of how such position could guide the outcome of the research (Berger, 2015). By utilizing the software NVivo 11- 12 Pro, I ensured intercoder consistency of constant comparisons of the coded information (Woods, Paulus, Atkins, & Macklin, 2016). Discrepancies were discovered and noted in the Results section of this study.

Ethical Procedures

Walden University's Institutional Review Board (IRB) approved the research application to conduct this study prior to collecting data. The IRB approval number is 1103170320694 and the expiration date is November 2, 2018. The IRB application was designed to capture information regarding how the study was conducted and if there are any conflicts that may violate the National Institutions of Health guidelines or presents ethical issues. The IRB application also gathered information to assess for possible risks and benefits of the study that may impact the participants.

This study acquired the assistance of the affiliates of the Department of Children and Family Services where foster care provider classes are held, at foster care agencies where foster parents are present, Facebook pages and on Walden University's Participant Pool for Research Studies website as a means to distribute recruitment letters to

volunteers. Participants were provided a recruitment letter which included information regarding the purpose of the study, an informed consent, and information pertaining to their rights to participate prior to agreeing to be interviewed. By utilizing these groups to distribute the recruitment letters, I was assured that the proper group of participants were contacted.

Participants were treated with a professional approach. I assured each participant of their ability to speak freely and that they would not be judged. Each participant was advised of their right to discontinue participating in the study at any time. Volunteers were made aware that their identity would not be disclosed, and their information would be coded to protect their identity.

Possible ethical concerns regarding recruitment materials and processes were addressed by following the appropriate guidelines set by the IRB. There were no instances of concerns presented during the data collection process. I refrained from knowingly interviewing personal friends who are foster care providers which would cause an ethical concern.

The data collected was held to be both anonymous and confidential. Anonymity was provided to each participant by utilizing a numerical identifier rather than their names. Interviews were conducted over the phone to provide a safe and comfortable setting. All the data were stored on my personal laptop which is password protected. Confidential information can only be accessed by me. I followed the guidelines provided by the APA and is preserving the data for a minimum of 5 years.

Summary

In Chapter 3 I provided the reader with information concerning the phenomenological methods utilized to develop research questions and interviews, steps used to recruit participants, to analyze data, apply confidentiality, and meets all ethical requirements. In Chapter 4 I described the results of the applied methods to this qualitative study. Information regarding the participant's demographics, issues regarding trustworthiness or data analysis, and any discrepancies encountered during the application of the methodology process will be discussed in Chapter 4.

Chapter 4: Results

Introduction

The purpose of this qualitative, phenomenological study was to gain insight into the lived experiences of foster care providers who care for children who are diagnosed with a mild to chronic health condition taking medications for the condition who had experienced multiple placements. In Chapter 4, I provide the results of the phenomenological analysis conducted to address the following research question: What are the experiences of foster care providers regarding medication adherence for foster children after the child has been removed from a previous caregiver?

Chapter 4 begins with a description of the settings, followed by a detailed description of demographics, data collection, data analysis, and trustworthiness. In this chapter, I present a discussion of the resulting categories and themes that emerged from the responses of participants during the interview process. A review of findings, any discrepancies, and a summary of the results conclude this chapter.

Settings

Each participant engaged in an anonymous phone interview with me and chose a private, comfortable location from which to conduct the anonymous phone exchange. Most participants were content in conducting the interviews at their own place of residence. One caller made contact from a public location and felt secure to complete the interview. I used a blocked caller-ID cellular phone that allowed participants to remain anonymous and provided them with a sense of security so they could feel free in expressing their experiences and behaviors when answering questions.

Demographics

Participants in this study consisted of four male and 11 female foster care providers for a total of 15 participants. A summary of the participant demographic characteristics are provided in Table 1. Four of the 15 foster care providers were trained to care for special needs children and carried a special care license for the type of health conditions the children may present upon placement. Foster care providers who had not obtained specialized care licenses achieved their training through local college courses that may focus on one topic for 1to 3 hours per class. Each foster care provider in this study represented one foster child (for a total of 15 foster children).

The children in this study consisted of four females and 11 males. The ages of the children ranged from 2- to 20-years-old with an average age of 9-years-old. The length of time in placement with the foster care provider ranged from 3 months to 13 years with an average of 2.5 years. Foster children in this study had experienced multiple placements; some children experienced four to six placements while in care. On average, foster care children had experienced two placements or had been moved to a new foster home more than two times.

Diagnoses for the children included ADHD, ODD, asthma, depression, diabetes, schizophrenia, seizures, Dandy-Walker syndrome, and a heart murmur. The majority of the children were diagnosed with ADHD and/or asthma. Medications for the children included Conserta, Clonidine, Ritalin, Risperidone, Adderall, QVar, Beclomethasone, Temazepam, Seroquel, DXL Methylphenidate, Trileptal, Diazepam, Metformin, Humalog, Lantus, Phenobarbital, and Keppra. The medication regimen averaged one to

two times per day (i.e., morning and evening), and the majority of the medications were in pill form, inhaler, or injections. A summary of demographics that includes the child's gender and age at the time in placement, amount of previous homes, diagnosis of the child, and medications the child was prescribed at the time of placement or after placement are listed in Table 1.

Table 1

Participant Demographics

Participant	Participant gender	Child gender	Child age	Previous homes	Diagnosis	Medications
A1	Female	Male	13	1	ADHD, ODD, depression	Conserta & Clonidine
B2	Female	Male	10	5	ADHD	Ritalin
C3	Female	Male	10	6	ADHD & asthma	Risperidone & Conserta
D4	Female	Female	8	3	Asthma	Adderall & QVar
E5	Female	Male	12	4	ADHD	Adderall
F6	Female	Male	5	2	Asthma	QVar
G7	Male	Male	4	1	Asthma	Qvar, Beclomethasone & Dipropionate
H8	Female	Male	12	3	ADHD	Ritalin
I9	Female	Male	15	2	ADHD & schizophrenia	Temazepam & Seroquel
J10	Male	Male	8	3	ADHD	Dxl Methylphenidate
K11	Female	Male	2	2	Heart murmur & seizures	Trileptal and diazepam
L12	Male	Male	4	1	Diabetes	Precose
M13	Female	Female	20	4	Diabetes & Dandy-Walker syndrome	Metformin & Blood pressure medication
N14	Female	Female	10	4	Diabetes	Humalog and Lantus
O15	Male	Female	3	2	Seizure disorder	Phenobarbital & Keppra

Data Collection

This research did not include a pilot study. In this study, I sought out to collect data regarding the perceptions, beliefs, and attitudes of foster care providers toward medication adherence for the children in their care. Invitations to participate in this study were made available where foster care provider classes were held, at foster care agencies, and where foster parents were present. The invitations informed possible participants of the focus, purpose, long-term goals, and qualifications for participation in the study. In addition, information, such as the approximate time needed to complete the interview, sample interview questions, my name, the name of the school, and how to contact me, was made available in the invitations. Potential participants were also advised that any participation was voluntary and that the interview could be stopped at any time, the incentive amount (described below), the IRB approval number, and the phone number with which to contact me.

Duration of Data Collection

Upon contact by phone, I read all 15 participants the consent agreement, and they gave a verbal consent, agreed to be recorded, and agreed to participate in the interview. The interview timeframe was between 29 to 61 minutes with an average interview time of 38 minutes. Of the 15 interviews, all except one participant conducted the interview from their place of residence. The consent agreement included the background information to the study, the approximate timeframe for the interview, the voluntary nature of the study, risks and benefits of the study, payment for volunteering, privacy or anonymity policy, information regarding contacting me and Walden University, and the IRB approval

number for this study. Participants were provided with a Google e-mail address and password upon initial contact during the interview. This Google e-mail address was utilized to distribute the consent agreement, the target code for the agreed incentive, and to express gratitude for their participation. The first seven participants were not offered an incentive to participate in this research study. Due to a lack of participation, I offered a $25-dollar Target gift card to the final eight participants, which they accepted.

A scripted interview was used to ask questions and gather answers from each participant. Upon completion of the scripted interview questions, I asked if any answers needed to be changed or altered, and if there were any concerns that needed to be addressed. After questions and concerns were addressed, I advised the participant how to log in to their assigned e-mail address, retrieve and save a copy of their consent agreement, obtain the incentive if one was provided, and thanked them for their time and participation in the study.

Data Recording and Transcription

Prior to the interview process, I developed a system to create a unique code for each participant. No names or identifying information were collected in this research study. The unique code consisted of a set of four numbers: the two-digit number from the invitation; the county representing the child, coded as 01 for one of the counties and 02 for the other; the month and date in numeric form of the interview; and the last two numbers represented the assigned e-mail address numeric code referencing the e-mail address login provided to the participant. Together, these numeric identifiers allowed me to create a numeric code that became the unique participant identification code for each

volunteer and helped to sustain anonymity. Finally, each unique participant identification code was shortened to an alpha-numeric identifier (i.e., A1–O15), which was then assigned to the participants within the NVivo-11 Pro software system.

I utilized the Google Voice application to record each interview session. Once the call was received, an automated voice announced that the call was being recorded. There were a few instances of inaudible responses and the participant was asked to repeat or clarify responses. Notes and correction to responses were made during each interview. I created an interview template for each participant that contained the unique participant identification code associated to each participant, the interview questions, and blank answer sections. This template was then used to create the transcribed document during the transcription process.

By carefully listening and typing each interviewed conversation, I was able to transcribe all 15 recorded interviews from the Google Voice application to Microsoft Word. A set of earphones were employed to help amplify each interview session and to enhance the clarity of each conversation. To eliminate inaccuracies, I typed out the conversations first, then replayed each conversation while reading the typed-out version three times. Edits were made to each transcribed interview until they were correct. One variation in the data collection was discovered during the transcribing process. A few of the participants were interviewed with variations of questions due to updates made to the interview questions.

The Google Voice recordings, assigned Google e-mail addresses, and Google phone numbers used for completing the interviews were deleted from the server upon

completion of this study. All information obtained during the interview process, including a copy of the voice recordings, will be stored on a password-protected laptop and any notes or hard copies will be kept in a locked file cabinet for 5 years, then destroyed as instructed by Walden University's IRB.

Data Analysis

Bracketing

I implemented the bracketing method prior to data collection. Self-analyzation of biases was conducted by reviewing the interview questions before each interview was conducted. A preconceived bias in the belief that foster care providers were encountering barriers to medication adherence by the social worker was noted during this process. By setting aside these preconceptions and withdrawing any emotions or experiences that may interject obscurities into the data, I was able to reduce any biases (see Tufford & Newman, 2012). The focus remained on the participants' experiences, and I was able to engage in the interview process without bias.

Thematic Analysis

I used the six steps to the thematic analysis approach as demonstrated by Braun and Clarke (2006) to conduct the inquiry into the data collected. The first step in thematic analysis is to become familiar with the data (Braun & Clarke, 2006). By manually transcribing all interviews, I was able to become familiar with the data and gained a deeper interpretation of the possible emerging themes. After each of the 15 interviews were transcribed to Microsoft Word and reviewed for accuracy, each of the transcribed interviews were transferred into the NVivo 11 Pro software application. The second step

as noted by Braun and Clarke is to generate codes. Codes, or what is referred to as "nodes" within NVivo 11 Pro, were then created by associating an interview question with a response from the participant (see NVivo11 QSR, 2015). I then completed the third step of thematic analysis--defining potential themes (see Braun & Clarke, 2006).

By acquiring the assistance of the query function within NVivo 11 Pro system, I captured common phrases and text, or terminology frequently spoken by the participants. Common responses were then coded and placed into a relative case classification: demographics, cues to action, perceived barriers, perceived benefits, perceived severity, perceived susceptibility, and self-efficacy. In the fourth step, a review was performed to assure a relationship between the extracted codes and themes across the entire data set (i.e., Level 1; see Braun & Clarke, 2006). A thematic map (i.e., Level 2) was also generated within the NVivo 11-12 Pro System to allow a clear vision into the relationship of the extracted codes and themes (see Braun & Clarke, 2006). Further refinement of themes continued in the fifth step of the analyzation process and allowed clear insight into potential story the overall data was portraying. Finally, the sixth step of the thematic analysis process was applied. In this final phase, I was able to finalize a holistic report of the captured data into themes, connect those themes to the research question, and produce a scholarly report of the findings (see Braun & Clarke, 2006).

I discovered discrepancies during the analysis of comments made by foster care providers regarding the severity of the diagnosis and/or the side effects of medications for the children in their care. Other discrepancies were noted regarding the intake process and training between foster care providers who were trained to care for special needs

children and those who were not. All information captured in these areas were considered in the findings and are further described in the Discrepancy section of this research study.

Evidence of Trustworthiness

In order to maintain trustworthiness in this research study I implemented steps to assure credibility, transferability, dependability, and confirmability. The tools utilized to establish trustworthiness included bracketing, prolonged engagement with the participants through interviews, reflexivity, saturation, and a detailed log of all steps that led to the results of findings. These tools afforded me the ability to maintain trustworthiness throughout the research process.

Credibility

Credibility was initially established by implementing the HBM's concept of perceived susceptibility, perceived severity, perceived benefits, and barriers into the formulation of the interview questions. The semistructured interview questions allowed me to extract the actual experiences of the foster care providers who cared for children with mild to chronic health conditions by asking questions that allowed the participant to express their real live experiences. Reflexivity was constantly utilized throughout the interview, data analysis, and results processes to assure assumptions and preconceptions were not affecting outcomes. Saturation was also applied during the data collection process to implement internal validity. By reviewing manually transcribed interview recordings for accuracy several times and allowing participants to make changes to responses, credibility was established.

Transferability

Transferability or external validity was implemented in this research study by using thick descriptions of participants and the foster child in care. The geographical area of each participant, county representing the child and any training for the care provider were revealed to help future studies accurately replicate this study. In addition, detailed steps of methodology have been described to further account for accurate transferability. Notes were taken during formulation of interview questions, interviews, the transcribing process, coding process, the creation of themes, analysis process, and results process. Direct quotes from participants will be found in the Results section of this research study. Data saturation was also a tool utilized to implement viable transferable processes. These steps have been provided to insure accurate transferability.

Dependability

The dependability of this study relies on the ability of replication of results (Shenton, 2004). The use of a decision trail and notes allowed me to keep record of all research activity and processes. In addition, semistructured interview questions were designed to ask participants identical questions for consistency and allowed for replication of possible responses. Many of the responses offered the creation of themes which provides credibility to the dependability of this study's ability to be replicated.

Confirmability

The confirmability of this research study was validated by using the reflexivity and the constant comparison mechanism found in NVivo 10 software (Woods et al., 2016). Confirmability is found when the research shows clear evidence of the

participant's experience and not as a result of the researcher's preconceived notion (Shenton, 2004). Reflexivity allowed me to stay constantly aware of perceived notions and positions. Clear evidence of the participant's experience was established through individualized interviews of participants and consistent emergent themes found through intercoder consistencies of the coded information.

Results

The purpose of this phenomenological research study was to gather and analyze the experiences of foster care providers who care for foster children that have been diagnosed with a mild to chronic health disorder and have encountered multiple placements. The Health Belief Model was implemented as the framework to explore how the experiences expressed by foster care providers related to positive or negative medication adherence behaviors for the child in care. The six components of the HBM, perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy were the categories utilized to organize experiences into the themes. Those themes then allowed the me to conceptualize how foster care providers may demonstrate a positive or negative medication adherence behavior for the child's health concern. To understand the phenomenon, the following research question was formulated: What are the experiences of foster care providers regarding medication adherence for foster children after the child has been removed from a previous caregiver?

After a compendious literature review and the development of HBM guided interview questions, basic themes were identified during the data collection and data analysis process. Through constant comparisons of experiences and themes, I was able to

discern how the foster care provider's lived experiences and perceptions guided positive or negative choices related medication adherence behaviors. Reflexivity was maintained to refrain from personal presumptions and assumptions of desired outcomes.

The analysis began with the initial intake process of each child. Participants in the study were questioned about their experiences during the intake process with the foster child and social worker, their understanding of the child's diagnosis and side effects, their beliefs about the severity of the child's diagnosis and side effects, benefits of the medication and medication adherence, their ability to care for a child who has been diagnosed with a mild to chronic health condition, and any general negative or positive concerns that may not have been addressed. Within the six categories of the HBM, multiple interview questions were generated to gather informative responses. From those responses, eight themes and multiple subthemes were identified. The themes included limited information, severe diagnosis and symptoms, severe medication side effects, medications and follow-up visits are beneficial, perceived barriers, identifying negative changes and responses to changes, maintaining the treatment plan and communication with doctors, and self-efficacy. These themes and responses are discussed in detail below.

Theme 1: Limited or No Information

Perceptions of susceptibility or the chances of acquiring a mild to chronic health condition and/or exasperating a foster child's existing diagnosis was the first category analyzed for themes. The overall line of questioning in this section allowed me to gather a deep understanding of the experiences of foster care providers during the intake process. By gaining insight into the foster care providers' first experience with the child,

the initial understanding of the child's condition and medications, and the perceptions, beliefs, and attitudes toward the child's medications, behaviors, and condition, I was able to obtain several subthemes.

Initially foster care providers described experiences such as limited information regarding health diagnosis, problematic behaviors, and medications during intake. During the intake process several subthemes were noted. The first subtheme, no diagnosis was described by Participant F6, "When they brought him to my care, they didn't even say that he has uh he was uh um asthmatic" and by O15 who stated, "…it was on an emergency visit in which we got the diagnosis and the medicine.". The next theme discovered was no medication, "She had been on the medicine previously at other homes, but she didn't have the medicine when she came to me" which was expressed by Participant D4, and "No inhaler. No medication at all" was the initial experience of Participant G7.

Another subtheme noted was little or no information regarding the child's behaviors as revealed by Participant F6, "I didn't know, and they didn't tell me anything…", and Participant H8 stated, "I knew something… he couldn't come straight… couldn't focus. Had a hard time focusing… he'd get angry easily. So, I knew something was going on at that point.". Participant O15 also pointed out, "we did not get any information besides failure to thrive.".

The majority of the children's diagnosis were ADHD and asthma. A few foster children were diagnosed with diabetes and two children were diagnosed with a seizure disorder. A common theme among many foster care providers noted during intake was

the lack of or very little knowledge about the medications the children were prescribed. Participant B2 stated, “I know, I know very little… about it without looking it up” and Participant E5 announced, “I didn’t know anything about it.”.

The next subtheme identified was the effects of missed medications. After the intake process further analysis shows foster care providers made similar comments regarding an increase in symptoms of the diagnosis, negative behavior, and an increased chance of fatality for some conditions when medications were missed. Foster care providers noted children in their care who were diagnosed with ADHD demonstrated hyperactivity, impulsive behaviors, and problems functioning in school as related to the diagnosis. Participant C3 claimed the child as “very hyperactive, can’t sit still, can’t focus, start failing in school” and a similar statement by Participant H8, “If his medication is missed, he… he realized it and he has realized that he can’t function at school.”.

Children who were diagnosed with asthma were described as having issues with coughing, wheezing, struggling to breathing and weakness. Participant D4 described a possible experience in missing medication as, “Well she can go into an arrest. An asthma arrest where she not able to breathe and needs emergency attention. Loses oxygen. She would lose oxygen.” And a similar statement by Participant F6, “Well, probably stop breathing.”.

Theme 2: Severity of Diagnosis and Symptoms

The perceptions, beliefs, and attitudes toward the child’s diagnosis, medications, and the side effects of medication can have an effect on positive or negative medication

adherence behavior (Yue et al., 2015). The interview questions related to the severity of the child's diagnosis, medications and side effects were formulated to capture the foster care provider's perceptions, beliefs, and attitudes that may lead to a positive or negative medication adherence behavior. In addition, foster care providers were questioned about their attitude or beliefs in stopping or altering medication regimen to further discover perceptions of "severity.".

A review of the overall collected data reflect the perceptions and beliefs of foster care providers regarding the severity of the child's diagnosis to be of a severe nature. Comments regarding severity were found among foster care providers whose children were diagnosed with asthma. According to Parent F6, "Asthma, I know that its uh, um… from my knowledge it's like, it's kind of like… its life threatening… because without breathing you're not able to survive in this world" and Parent G7 stated, "It can be serious, yes and without this medicine, yes… it can be fatal to them. Cause he can stop breathing.". Both foster care providers portrayed Asthma as a diagnosis that is severe and detrimental to the child's life.

The theme of severity continued to reflect in comments made by foster care providers whose child was diagnosed with diabetes and seizure disorders. Foster Care Provider J10 stated, "it's serious to this child…it's very serious" and this was also repeated by Parent K11, "Yes. It's a serious diagnosis.". When diabetes was the disorder in question, Parent L12 reflected on the issue of the importance of diet and stated the following:

> I believe so… I believe its life changing because you have to be very, very alert of how the individual feels… and what that individual should be eating or drinking and got to make sure that they're eating and hydrated.

Similarly, Parent M13 whose child was of age to consent and diagnosed with diabetes stated, "It can be if she don't take care of herself" when addressing the importance of diet and how diet can affect the severity of the illness. Foster care providers of both young children and adolescents agreed that diabetes and seizure disorders were severe conditions that could result in life threatening situations.

Children diagnosed with diabetes were described as having symptoms such as low or high sugar that could cause problematic health issues. Participant L12 stated, "If he didn't take the medication his sugar would drop too low and he would actually, the little boy ended up having night terror.". Moreover, participants felt that missing medications could be deadly as stated by M13, "She can become very ill (crosstalk) and possible die if she don't have everything she needs" which is consistent with Participant N14's statement, "The child could pass away… could be detrimental to the child.". These perceptions of fatality should the child miss the medication points to the understanding of perceived susceptibility and the severity of the diagnosis.

Another subtheme was, problematic behaviors for children diagnosed with ADHD. After analysis of the data related to the severity of the child's diagnosis, medications, and medications side effects, similarities in beliefs and perceptions were discovered. The first subtheme noted was consistent talk about children who were diagnosed with ADHD as having negative behaviors and the symptoms of the diagnosis

as being *severe*. Parents C3, E5 and J10 all related the severity of the diagnosis to the behaviors of the child. During the interview, Parent C3 stated, "Without the medication, yes. It can be very destructive" and Parent J10 commented, "it's serious to this child…it's very serious.". In a report of the child's behavior during the initial intake process, Parent E5 described the experience of the disorder as serious and made this comment:

> At the time they were. I think because, I'm… (mumbled) he was the first child that I had that was on medication. And I didn't know why he was doing the things he was doing or why he was behaving the way he was behaving. Because I couldn't understand you know why… what are you doing why… sit down… you know… why are you so impulsive? You know… um… and besides from just being a kid, I mean playing outside doing other things… it was just at times when we could be quiet times or we're reading, and he just can't stay still. And I was like okay, somethings going on. So, um… at the time yes.

Theme 3: Severity of Medication Side effects

The next themes were formulated in the area of side effects. In this area the theme "sever*"* was also noted among foster care providers of children diagnosed with asthma, diabetes, and seizure disorders. Parent C3 and I9 had a general overview of side effects, "Yes. I take all side effects *serious*" and "In general, yes. In general, yes" (I9). Another common side effect described was related to 'not *eating'* as it was mentioned by both Parent C3, "*Losing weight*, that could be not healthy for him if he get below his weight" and Parent D4:

> Yeah, I think so. Maybe after a half an hour she show side effects of the hyperactivity, *later lack of appetite*, and then at night… because I gave her the inhaler again at night, sometimes she couldn't sleep well. (D4)

These themes described the common positions of foster care providers in their perceptions, beliefs, and attitudes toward the severity of medication and side effects. Foster care providers who cared for children diagnosed with ADHD unanimously agreed that there were no side effects resulting from mediations when questioned directly. Interestingly, some foster care providers described the child's mood change after taking medications prescribed for ADHD.

Subtheme: ADHD Medications Can Be Stopped or Decreased by Foster Care Providers

Foster care providers' perceptions and beliefs regarding decreasing and stopping medications were similar among those who cared for children diagnosed with ADHD. Cases where the child was diagnosed with asthma, diabetes, or a seizure disorder the foster care provider believed they needed to reference the doctor prior to altering or stopping medications. This discrepancy is further described in the Discrepancies section.

A query of the text "severe" revealed a comment made by Parent E5 whose child was diagnosed with ADHD, "Because it's not a severe case, and were talking about my child... *it can be stopped*.". Stopping medication and even altering the medication regiment was supported by foster care providers whose children were diagnosed with ADHD as stated by Parent J10:

My beliefs are… if I see a positive result with the medicine while the foster child is taking them… then I see the results of *that he doesn't really actually really need it anymore*… then I would *decrease* it and that would more or likely *put an end to it*".

Foster care providers were very expressive about leaving children on medications for long periods of time. Parent B2 expressed his concern by stating, "Because as he get older you know I don't think that he should still be taking medicines once he get 17, 18… I think *he will mellow out after he get older*" and Parent I9 had a similar belief about leaving children on medications for long periods of time, "I believe *you should stop medication*. I don't believe that a child or even an adult should be on medication for the rest of their life.".

When the question of stopping or decreasing medications was presented, Parent C3 described their belief by stating, "I'm with the child more than the doctor is. More than the psych evaluators are… so *my opinion matters the most*…" and when questioned about their ability to override the prescriber's advice Parent A1 replied, "*I can*… I just, yes and no" and similar replies from the following foster care providers: Parent F6, "*I, I think so …. Yeah…*", Parent H8, "*well yeah, he's in my care and I'm with him 24 hours so, I would say yes.*", Parent I9, "*Yes, because I'm the one that sees him every day* and I'm the one with him every day and the doctor only knows what I tell him.". What is consistently being reported reveals foster care providers who were caretakers for children diagnosed with ADHD believed that their experience with a child, held more weight than that of the prescribing doctor's advice in the management of the prescription.

Subtheme: No Medications on Weekends For ADHD

A search of the text "weekend" found multiple matches. Foster care providers of children diagnosed with ADHD believed that medication was not necessary on the weekends. Parent A1 commented, "he declined to take it over the weekend, and he does just fine… But other than that, I've seen him go *weekends* at a time not wanting to take it and he does just fine.". Similarly, Parent B2 stated, "I just don't give it to him on the *weekend* because I feel, you know… he, he really don't need it at home.". The weekend theme continued to be described by Parent H8 who expressed:

> On the *weekends* I do not give him the medication cause I'm able to handle him on the weekends… But he doesn't get any medication on the *weekends* then I'll start decreasing but, it normally happens when they get a little older.

These beliefs and attitudes toward medication adherence reflects the beliefs that the foster care provider did not feel that the behaviors or symptoms of the diagnosis were severe enough to continue medications on the weekend and thus no medication was administer on the weekends. It is apparent that the beliefs, attitudes, and perceptions of foster care providers toward medication effectiveness on the child's symptoms are crucial to medication adherence. Moreover, a clear manifestation of thought and behavior was described in the response to interview questions regarding stopping and decreasing medications for children diagnosed with ADHD. Furthermore, foster care providers reveal no evidence of their knowledge regarding the possible harm of a child when medications are stopped or the child experiencing side-effects due to medication nonpersistance.

Subtheme: Children Can Be Weaned Off Medications

Another common statement or common subtheme noted was regarding weaning children off medications. Moreover, some foster care providers believed that children with ADHD could be weaned off the medication or the child would grow out of ADHD. Parent A1 commented, “Uh, I think not stopped like suddenly, I think he needs to be *weaned off* of it.”, Parent B2 stated the same, “I think down the line, he can be *weaned off* and calm down as he get older.”, and finally Parent O15 repeated this statement regarding a general diagnosis, “from my experience we’d like to *wean them off them off* at a certain point but in her particular case we could not due to her medical diagnosis.”.

Subtheme: Opinions Do Not Override Diagnosis of Asthma, Diabetes, and Seizure Disorders

Other foster care providers whose child was diagnosed with asthma, diabetes, or a seizure disorder were consistent in their belief that their opinion should not override the prescriber’s advice. Parent D4 stated, “Oh, absolutely not” and Parent G7 described, “No cause he’s the one, he’s the one that has the knowledge of the medicine… you know he’s prescribing it” which became a common conveyed response. The foster care provider’s also felt that their opinion mattered but the doctor’s opinion should not be overruled as mentioned by Parent N14, “No… I just think it should at least be heard or taken into consideration… because I’m not a doctor.”.

Theme 4: Medications and Follow-Up Visits Are Beneficial

The perception of foster care providers toward the overall benefit of medication treatment and follow-up visits is important to understand as it relates to how positive

medication adherence behaviors are formed. In this area of analysis, I focused on medication benefits and the benefits of physician follow-up visits for foster children. Here foster care providers gave insight to their experience with changes in behavior and communications with the child's doctor during follow-up visits.

Subtheme: Positive Changes in Behavior

The data captured in the area of benefits reflected a very positive attitude. Foster care providers found positive changes in behavior as reported by Participant B2, "Yeah, it changed his behavior, his attitude" and Participant C3 stated, "It was helping her when she use the inhaler, she would sit a while.". Another common theme noted was positive functioning in school as described by Participant A1, "I notice in the morning when he does take it and he goes to school, he seems to be able to focus" and participant H8 also mentioned the benefits in school and changes in behavior, "I know the behavior it calms him down. The benefit for teachers… and school staff.". Moreover, positive behavior and attitude was a continual theme, "The child is happy, has energy, her mood… the child's mood improves" (N14).

Subtheme: Follow-Up Visits Allow Caregivers to Communicate with Doctors

The subthemes related to follow-up visits were related to having the ability to talk to the doctor about any concerns or updating the doctor on the child's health. Participant A1 stated, "The child is happy, has energy, her mood… the child's mood improves… That way you can, you know, they can keep monitoring his progress.". Participants also perceived the follow-up visits as a way to express concerns about the medications and adjustments needed, "The follow-up is very important. Because say for instance, if the

child didn't like the medication and something was happening…(M13)" which is similar to the belief of Participant N14, "Absolutely necessary to adjust and change medications as needed.", and Participant G7, "Well it's very important cause it… lets it… as far… it's very important to take him to the doctor's appointments because they can analyze him if he needs less or more medicine.".

Overall, foster care providers made positive comments about the changes in behavior and health condition once the child received the benefits of the medications prescribed. Follow-up visits were important to all foster care providers as they perceived this component of medication adherence as a time to describe concerns about medications and behaviors to the physician. And to allow the physician to determine if any adjustments were needed regarding the medications prescribed.

Theme 5: Perceived Barriers

According to Yue et al. (2015), the perceived barriers construct of the HBM model has a higher predictability and consistency rating in the area of positive or negative medication adherence behaviors. In this section, an analysis of perceived barriers for foster care providers was the focus. Questions surrounding any type of interference with positive medication adherence behaviors were asked.

As previously noted, foster care providers stated they were experiencing a lack of information regarding health issues and behaviors. The theme of limited or no information continued when foster care providers were questioned about interferences. The overall interferences expressed by foster care providers related to interferences or barriers in gaining access to health information and medications, or the child expressing

negative experiences with the medications. Foster care providers expressed experiences involving limited knowledge about the child's health condition, limited access to insurance, or pharmacy issues and experience issues in administering medication due to the child's refusal in this section of analysis. In addition to limited knowledge and information, communication between the current and previous foster care provider or group home was nonexistent.

Subtheme: Limited Information or HEP Information

In the area of barriers, the common responses reflected limited information regarding the child's health history and missing information in the HEP. The HEP is a compilation of documents that provides information such as the child's immunizations, diagnosis, parent history, reports about behaviors, and educational history of the foster child (Department of Family & Children's Services, 2013). Participant A1 stated, "That didn't indicate a lot of stuff" when asked about information obtained from the HEP. Similar quotes were noted by Participant D4, "Didn't have much past history. No. I, no. Absolutely not (crosstalk). I had to find out for myself. I wasn't told anything about it." when asked if the history was up to date in the HEP or if was told about diagnosis and behaviors. And Participant G7 had the same experience:

> But we haven't received his um, like his cards… his passport yet. Cause usually that takes about a month. Uh, uh… all we… we had was the asthma. That's all social worker told us when they dropped him off.

Not having received the HEP also lead to limited access to health information about the child as noted by participant G7, "But we haven't received his um, like his

cards… his *passport* yet. No cause we *didn't have the total information* yet, the *passport* yet" and Participant I9 stated, "But none of that was on it. I don't get it until like uh, almost 6 months later but that was not in the *health passport.*"

A lack of information from the social worker was another theme noted. Participant F6 stated, "So, I contact back again the social worker… the social worker told me again that there was no machine" when it was discovered that the child was missing the asthma machine. Similarly, Participant L12 experienced missing equipment stating, "Very little. And so, when she arrived, she didn't have the proper supplies and stuff we were concerned, and we called everybody we could trying to figure out how to fix it"

Subtheme: No Communication with Previous Caregiver

Upon further questioning regarding obtaining previous health information, foster care providers all advised there was no communication with the previous foster care providers or group home. Many stated having more information would have been beneficial, "That would have been helpful, but I didn't get anything" (C3). Some expressed not knowing the previous foster care provider "The other foster mom, I don't really know her" (B2) and one thought that the previous caregiver may not feel comfortable sharing information:

> So, whatever the reason because why that child was moved out of that home may not been as favorable, so they're not going to reach out to you and say this is what happened…(E5)

Subtheme: Negative Feelings and Side effects Regarding Medications

When describing Negative feelings about medications, foster care providers stated the following:

> I just hate the way they make him feel and umm he's tired of taking meds is what he says. The child just don't want to take it. He just complains he doesn't want to take it. He's forcing himself to take it. (A1)

A similar testimony was also noted, "He felt the heaviness and we decided to shift it to another type of medication for him. And there were times you know… when he didn't want to take the medications. He didn't like taking the medications." (E55).

Negative side effects or encounters experienced by foster children included, "Just drowsy and sleepy" and "It makes them feel weird" (H8). Other children didn't like the injections for their diabetes disorder, "At the time when I'm administering the medication… that's when she tells me. She does not like to be poked, the needle hurts, the medication hurts when it's underneath the skin" (N14). These experiences could have an impact on how well the medication regimen is followed.

Subtheme: Systemic and Medication Access Interferences

Interferences were a category of subthemes formulated during the analysis of interviews. Systemic issues as stated by Participant A1, "Just waiting on the courts to approve the meds or the changes" and Participant O15 similarly stated the following:

> There has been 1 or 2 occasions with the social worker disagreeing or trying to follow up in regard to seeing if the child can take a specific medication whether it

> be something the doctor specifically diagnosed or finding out if we have clearance to do, to give certain medication.

Interferences such as not having access to the medication due to pharmacy issues or no medical insurance was also a problem expressed by some participants. One participant described an experience with interferences in medication adherence, "And sometimes we have to wait on a time period, three or four days without medication due to refill" (E5). And another Participant expressed:

> He's gone without medication due to funding… you know we had to wait. Funding would have played a role in it. Um, if um, his insurance was no longer available I would have to find a way, since you know… to get it and go and find some other alternatives. You know maybe a holistic approach to it. (H8)

Theme 6: Identifying Negative Changes and Response to Changes

Interview responses revealed the ability of the foster care provider to identify issues concerning changes in the child's behavior once medications were administered. In addition, upon evaluation of adverse symptoms foster care providers responded similarly. Many of the themes noted in this section show foster care providers have similar experiences in their ability demonstrate cues to action.

Subtheme: Identifying Changes in Behavior and Side effects

Foster care providers described how continuously observing the child allowed insight to possible changes in behavior as noted by C3, "I just pay very close attention to it… so I can see what's different. I try to find out what's changing. Is it a good change or a bad change?" and similarly stated by another participant:

> Because I look, and I listen for those things that were happening prior to taking the medication. I kind of like monitor. If it's an unusual change… because I am a mother and I've raised my own children… so change would be something that I'm not used to… so I would contact the doctor (M13).

Captured data results show that foster care providers were able to identify side effects and describe them. When foster care providers were asked how the child experienced the side effects of the medication, many noted a quiesce mood or that the child experienced dry mouth. Instinct or past experiences with medications was expressed by this foster care provider as a means to determine the medications side effect on the child. Other foster care providers described similar experiences with mood changes for the children in their care when they noticed changes after medication administration. Participant A1 described the experience as:

> First 30 minutes always notices a *demeanor* spirit when he's around home. And I notice he's really kind of *quiet* and then he'll start… mean like I said, about an half an hour will go by and then he'll kind of start filtering in and you know… moving around but, at first he's like really kind of *still*.

Which is similar to Participant J10 who stated:

> I might remember experiencing the child like being probably being like in a stuck mode a period of times… like just sitting there and just looking like not at the sky but just stuck like…and I could tell it's the medicine working… kicking in because it goes from hyper, hyper, hyper to *calm*, calm, calm… this *daydreaming*,

> daydreaming and the next thing you know… just playing with his toys and going back to normal.

The dry mouth issue was described as a concurrent side effect was in concert with a change in mood as noted by Participant E5, "He would report that his mouth would be dry. He would report that he sometimes felt a little sluggish." and by Participant H8, "And he just has a dry mouth."

Other common experiences of "hyper" behaviors or side effects were noted after medication was administered. Participant D4, "Maybe after a half an hour she show side effects of the hyperactivity, later lack of appetite, and then at night…" and another participant similarly stated:

> Well, when he's uh hyper. You know side effects is like… it gets him hyped up… so we know that he's…you know the side effects is like he's really… talking, talking… or running and running… you know… stuff like that (G7).

Subtheme: Responses to Changes in Behavior and/or Adverse Reactions to Medications

When changes occurred, contacting the doctor was a common response. Participant E5, "I address it with the child and I address it with the doctor. And then we try to find something that's going to work". This theme continues:

> I partner with the primary care provider and the doctor if I notice something that is… maybe it's an off day for the child… yes, but if it's two or three then its immediately okay, I need to make a call.

Other foster care providers stated they would administer medication when changes in behaviors were noted. Participant D4 described the experience:

> She's not breathing normally. So that's when I will administer that. And then I watch her closely to see if she gets relief. If not, then she will have to go to emergency and then they would take it a step further and put her on a breathing machine.

Another participant described the experience and stated:

> Uh, well we uh… okay, we give him his regular medicine and then we take the other one as needed. And then if that doesn't help him… then we'll make an appointment for the doctor if we can see... and then uh it goes into uh a breathing treatment for him. (G7)

Theme 7: Maintaining the Treatment Plan and Communication with the Prescriber

Foster care provider's perception of managing the treatment plan was consistently expressed as, keeping appointments. Participant A1 stated, "Oh I just make sure he doesn't run out of meds, I stay on top of his appointments" and Participant C3 similarly stated, "I just make sure I set their appointments on time." Keeping up with the physician's appointments was not only the method used to maintain the treatment plan.

Keeping the medication on hand and keeping to the scheduled regimen was also noted as an important factor in maintain the treatment plan as noted by Participant D4: I keep the medication with me. I *keep a log* in my daily reminder showing that day when she needed to take it, when she had an episode with her asthma… when I give her medication" and Participant F6 replied, "*I carry the medicine with me all the time*.".

Making sure to give the medications routinely was important to Participant K11, "We try to… the hours that we give the medication its usually like *around the time* that he's waking up and the time that he's going to bed" and others who stated, "Oh we, you know we have him on a *schedule*" (G7).

Positive communications between the foster care providers and doctors also became a subtheme. This component of maintaining the treatment plan included the foster care provider to consistently report to the prescriber. Initiating talks with the doctor was a means of action taken to maintain a proactive behavior. The data shows that foster care providers felt that they were being heard when describing to the doctor issues regarding the child's behaviors, possible adverse reactions to medications, and other concerns. Participant B2 stated, "When I told the doctor, *she just listened* to me and noted it down" and Participant F6 had a similar experience and stated:

> Now um, it's its… its so um, *the doctor listen full time*. He, he does uh, I consider myself that I'm very lucky that I have a *doctor that listen* and pay attention to the kids. So, we don't have any problem with the doctor.

Good collaboration and communication between the foster care provider and the doctor was discovered when participants had similar statements. Participant C3, " I told the doctor *it needed to be reduced* and *then he told me I could reduce it* if it was too much for him at one time" and similarly stated by Participant E5, "So, she was *very receptive* to, you know *trying something else*" which continued with Participant M13's who stated the following:

> And by *communication* to the doctor the doctor would know … *well we'll lower that or try this*…you understand what I'm saying because once I tell them what the symptoms are and what I see then they can come up with a medication plan for them… for the child.

Theme 8: Self-Efficacy

Foster care providers have a duty to perform and make decisions that are in the best interest of the child in their care. The perception or belief that the duty can be fulfilled with positive outcomes relates to the foster care provider's ability to perform successfully. In this section the foster care providers ability to successful carry out their duties were examined by inquiring into several areas which included the understanding of medication adherence, training received, aid from social worker, their ability to continue to adhere, and any concerns that were not addressed.

Subtheme: Medication Adherence

When foster care providers were asked to describe their understanding of what is involved in medication adherence, the theme "*administer"* was noted. Participant C3 stated, "The way that I administer the medicine to the child. It be the administering and the follow-up" which is consistent with Participant D4, "Administering it… isn't it? Adhering to it."

Other foster care provider's saw medication adherence as a form of helping the child as noted by Participant B2, "It's to help him. I understand that by him taking it that it would help him uh, just everyday life… which he didn't get to have before." and Participant I9, "That the medication supposed to help him… but, calm him and stuff."

This form of belief manifested a positive attitude toward medications and in turn brought about positive medication adherence behaviors in foster care providers.

Finally, keeping to the "*schedule"* was another theme noted in this section and in other sections of data analysis. Participant K11 stated, "That you adhere to the medication schedule. It's very important. If the doctor says this is the medication, this is the time, this is the amount you have to follow that direction exactly" and Participant O15 stated a similar belief, "To follow up at the proper times, with the proper total of the medication… how its prescribed… if its 20ml or a tablespoon make sure to follow up with that at the designated timeframe."

Subtheme: Training for Foster Care Providers and Specialized Licenses

Training was another component analyzed in the area of self-efficacy. Foster care providers who receive training regarding the child's the child's diagnosis and medications may feel more secure in their duties as a care provider. The first theme of CPR was noted as Participant H8 stated, "CPR that kind of thing" which was also note by Participant J10, "If anything, it would probably be CPR." Some foster care provider's mentioned similar statements about timeframes for training. Annual and hourly training were mention by Participant B2, "You know how they give you different classes each month… just taking classes" and Participant K11, "So, we're to take 15 hours a year of the medical training."

A few foster care providers noted a requirement to hold a specialized licensed to care for children and experienced training directly from the doctor. Participant M13 described the training process by making the following statement:

> Before the child could be placed into my home I had to go to the child's doctor and the doctor or the nurse would explain to me about the medications that she was on… and then I would get medically trained for that child's special needs. Diabetes, anger management… there's a lot of different classes that are offered throughout the year that I participate in.

Which also refers back to the annual training period. Similarly, participant N14 quoted the following:

> Yes. I am a medical fragile foster parent and I receive children who have medical conditions such as seizures and or Type 1 diabetes, asthma, and I am specifically trained with each child… tailored to them… even it though it is a general diagnosis of their care, I have to be trained specifically for that child and what has worked with that child, so I have to be trained with every child that comes into my home. We've been trained previously on other diabetic children and it's been about 4 or about 3 years.

Subtheme: Inadequate Support from the Social Worker

To further understand components that could assist in self-efficacy participants were asked if they believed that there was adequate help from the social worker. Foster care providers stated:

> Well the adequate help from the social worker regarding that is none existent… there... I mean she just needs to make sure that JV220[1] is on point that's it. No. I,

[1] A JV-220 is document that is required to be completed by physicians who want to prescribe psychotropic medications to foster children. The application for psychotropic

> no. Absolutely not (crosstalk). I had to find out for myself. I wasn't told anything about it." (E5)

Which became a theme when participants continued by stating, "No, I just turn in everything to the social worker and I just have to do everything for the child. That's my responsibility. So, when that happened the social worker couldn't help me out with that" (F6).

A lack of support from the social worker was the overall continual theme as participants further described having to advocate for themselves. Participant H8 stated:

> Yeah, she does help. But, I'm all over it myself. So, yeah, she helps a little bit but, I have to be the advocate for that, or it won't get handled properly. Oh, they can do a lot more. Oh, yah but, yeah… I do believe that.

Participant M13 made a similar statement:

> If I need some help, I'm really proactive… so if a child come into my home and I see that there is a need… I'll let the social worker know and I'll reach out to the support group… and I fill out the paperwork and I'll pretty much do it myself. (M13)

Subtheme: Ability to Maintain Positive Adherence

In the next area of analysis, foster care providers were asked to describe their ability to continue to adhere to the child's medication regimen. The common response was "yes" and many believed that the regimen was easy to manage. Participant H8 stated, "Yeah, yeah… no problem" and Participant N14 confirmed, "I can… it's easy to

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medication(s) for foster children must be completed by the physician and submitted to a Judge for approval prior to filling the prescription.

administer to the child's medication… adhere to it." Some participants suggested that it was their duty to continue as stated by Participant I9, "Uh… he's… my ability is that I'm here… the guardian of him right now… to take care of him that I have to administer it."

Subtheme: Concerns Regarding Medication Adherence

The final interview question addressed any concerns regarding medication adherence that may not have been asked during the interview. Participants were typically concerned about the lack of information received when the child came into their care, a continued theme. Having to guess what issues the child was having was mentioned:

> Well the issues is, is that when a child is placed with you I ah, you really need to know what type of meds, how long they've been on meds, these are some things that should be brought to the table especially taking a child that's coming from another facility or another foster home. I believe that that's something that should be put out there so that way you don't have to do the guessing, you know guessing. (A1)

Some were concerned about continued medication care after the child left their care. These concerns were described by the following participant:

> You know sometime they, they take the medicine off and then uh… he be back the way he was… let's say if he go to another home and then that foster mom say he doesn't need it, and then they just take it away from him when he really did… you know… he really have been using it… he doing well with it. (B2)

Having a concern about medications while others are watching the child as Participant H8 described, "But, um the school like I said… but he goes to visit relatives

or something, I'll put him on it. You know…cause it's just hard to deal with a person, deal with him." This concern highlights the fact that foster care providers may believe that they have a better understanding of the child's behavioral issues. Furthermore, the perception of self-efficacy is important in this statement because it reveals the foster care provider believes that the efforts of medication adherence are beneficial.

Discrepancies

Upon analysis, a consistent divide in the perception of foster care providers between children diagnosed with ADHD and those children who were diagnosed with an asthma, diabetes, or seizure disorder became prevalent. Foster care providers who cared for children with ADHD showed a theme of flexibility toward medication adherence due to a laxed perception regarding the severity of ADHD. This group was more inclined to believe that medication could be weaned off or altered at the foster care provider's discretion. Moreover, foster care providers attitude toward stopping, decreasing, or altering medications was more acceptable if the child was diagnosed with ADHD.

Discrepancies were also noted between foster care providers who received training for a specialized license or what was stated to be a "medical fragile" home and those foster care providers who do not carry a special license. The participants (M13 – O15) who were deemed "medical fragile" licensed care providers may have different experiences in training and intake procedures. For instance, Participant M13 advised that before the child was placed in the home there was a visit with the child's personal doctor. This is not the case with those foster care providers' who are not licensed as "medical fragile" homes. Although there were a few discrepancies regarding training, those foster

care providers who maintained a special license consistently described similar experiences and themes as all other foster care providers.

Summary

The purpose of this phenomenological study was to gain an understanding of the lived experiences of foster care providers who cared for children with a mild to chronic health condition and have experienced multiple placements. With the obtained knowledge I was able to capture consistent themes that reflect how foster care providers perceptions, beliefs and attitudes effect positive or negative medication adherence behaviors. The results of the findings in this chapter reflect the statements made by foster care providers during an anonymous telephone interview.

The research question referring to the experiences of foster care providers who care for children with a mild to chronic health condition was described by 15 foster care providers. Throughout the results section of this study, foster care providers indicated their concern about missing or nonexistent health information. The expressed experiences began to form a theme from the very beginning, starting with the intake experience.

Limited information regarding the child's diagnosis, medications, and behaviors was the first noted theme and became a constant theme throughout the findings section of this study. Foster care providers described the information obtained during the intake of the child as limited or nonexistent. No diagnosis, no information provided about behaviors, and a lack of knowledge about the prescribed medications was constantly communicated by foster care providers. Moreover, the theme continued to manifest in the lack of information provided within the HEP. In this area the foster care providers

indicated the HEP was not helpful in providing past medical and educational history needed to properly relay information to the new prescriber and/or new school. Some participants experienced extensive delays in receiving medical insurance cards and/or health information from the social worker.

The next theme Severe Diagnosis and Symptoms began to form while inquiring information about the child's behaviors with medication and without medications. Initially, foster care provider's noted hyper and impulsive behaviors of those diagnosed with ADHD. For some children, the symptoms and behaviors were so severe that medications were prescribed. In general, it was the symptoms and behaviors that foster care providers noted as severe.

Other foster care providers whose children were diagnosed with ADHD communicated a more laxed view of the severity of the diagnosis and side effects of medication. Furthermore, this group of foster care providers expressed their ability to alter medication regimen and stop medications without approval from doctors which relays a more relaxed attitude toward the severity of the diagnosis.

Other children who were diagnosed with asthma, diabetes, and seizures were described as having a severe diagnosis and severe symptoms if medications were missed. The belief that missing medications could lead to increased health risk such as having issues with breathing, possibility of going into a diabetic coma, and the child experiencing a seizure led to the perception of severity of the diagnosis and symptoms for this group of participants. Foster care providers expressed how some children could

experience severe health complications and even death if proper medication adherence behaviors were not consistent.

The theme of Severe Side effects became prevalent when foster care providers who cared for children with asthma, diabetes, and seizure disorders agreed that the side effects of medications were severe. Some side effects were severe enough that foster care providers became watchful of food intake (lack of appetite) and sleep issues. The belief that the side effects of medications for some children caused the child's heartbeat to increase or become irregular was a concern for a few participants whose child was diagnosed with asthma. For those children diagnosed with ADHD, foster care providers did not agree that there were any side effects resulting from the medications the children were prescribed.

Through the analysis of the experiences conveyed by the foster care provider, it was revealed that participants believed the medications and follow-up visits were beneficial. Over a period of time, positive medication adherence behaviors of the foster care provider resulted in a change in the child's ability to perform and show positive behaviors. Furthermore, the benefits of proper medication treatment was described by foster care providers in their assertion of positive changes in the child's behavior at home and school, and in their expression of the benefits of having good communication with the prescriber.

Throughout the data analysis process multiple barriers were noted and the formulation of the theme, perceived barriers was created. The lack of health information and support from social workers were continually expressed by foster care providers. Not

providing medical history (HEP), diagnosis, and medications within a timely manner created barriers to appropriately maintain proper medication adherence. Barriers were also described in the area of obtaining medications from the pharmacy due to a delay in the pharmacy obtaining the medications. Participants also conveyed an inability to communicate with the previous caregiver and prescriber regarding prior health history and education.

Furthermore, systemic issues in obtaining authorization to provide psychotropic medications and issues filling medications as described by foster care providers also have created barriers to proper medication adherence behaviors. Other issues that lead to barriers included negative perceptions of medications and the side effects of the medications by the foster care provider. Children's disliking of the taste of medications and some who did not like to partake in the injections of insulin also provided insight into the barriers foster care providers have experienced.

Cues to action were consistently described as foster care providers communicated how they responded to changes in behavior and in emergency situations. Identifying negative changes and responses to those changes became an overarching theme as foster care providers indicated their ability to build an understanding of each child's behaviors and reaction to medications over time. From those experiences, the providers were able to identify changes in behaviors related to medication and adverse reactions to medications. Calling the prescriber and taking the child to the doctor was a common response after noticing change. In some instances, children were administered medication or taken to the hospital.

Foster care providers conveyed a positive attitude toward Maintaining the treatment plan and communicating with the doctor. Many participants described their ability to maintain the treatment plan by keeping the medications filled, on hand, and by keeping doctor appointments. Others described how administering medications in a timely manner and following a schedule helped to maintain the regimen. Communication with the prescribing doctor was an additional component of maintaining the treatment plan. Foster care providers also relayed positive feedback from their experiences with the prescribers. The participants' attitudes toward communicating with the prescriber indicates a positive perception of their ability to advocate for the children in their care.

Self-efficacy was found to be a prominent theme as foster care providers announced their ability to successfully advocate for the children in their care despite the numerous barriers they experienced. By expressing and demonstrating their ability to continue to care for the children and follow the medication regimen, foster care providers present positive self-efficacy behaviors. Foster care providers consistently advised of their concerns in the area of missing information regarding medications, health history, and having to find information on their own. Regardless of these issues, foster care providers remained positive in their ability to successfully care for their children. In Chapter 5 I will present the findings of this study and conclude this research study.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this qualitative, phenomenological study was to capture the lived experiences of foster care providers who cared for children diagnosed with a mild to chronic health issue and had experienced multiple placements. Furthermore, this research study was conducted to explore the concerns of medication adherence issues for the children placed in foster care from the perspective of the foster care provider. By exploring these experiences, I was able to identify common experiences, perceptions, beliefs, and attitudes in the areas of administering and monitoring medication, side effects of medications, and follow-up visits.

In the beginning of each interview, the foster care providers described their initial experiences with the child and the child's medications. Many providers expressed having multiple issues regarding a lack of information about the child and in their initial understanding of the medication and side effects. The perceptions, beliefs, and attitudes of foster care providers toward the diagnosis, medications, and side effects on the children varied based on the type of diagnosis and medications. Furthermore, their views on the ability to alter medication regimens also revealed different perspectives based on the behavior of the child.

After the initial intake, foster care providers expressed having difficulty understanding the maladaptive behaviors of the child. The problematic behaviors were commonly undiagnosed and addressed after the child was placed with the new foster care provider. Problematic behavior, a new diagnosis, medication intervention, and placement

instability were common trends manifesting among children with a mild to chronic diagnosis. Furthermore, many of the foster care providers described experiencing systemic interferences during the process of obtaining prescribed medications for the children in care. These interferences were often created by a lack of information or support from the social workers and furthered by the slow processes of the juvenile dependency courts.

The ability of the child to become susceptible to the issues of the diagnosis were expressed as participants described an increase in symptoms and maladaptive behaviors when medications were not properly managed. Moreover, foster care providers were able to describe instances where an increase of symptoms cued actions of positive medication adherence and the child's health concern decreased. These actions included contact with the prescriber and a follow-up visit. Foster care providers noticed benefits of medication interventions after proper medication adherence, follow-up visits, and advice from the child's physician were executed.

Many foster care providers encountered various barriers, such as limited training regarding the child's diagnosis and medication prior to placement, not being informed about the child's inappropriate behaviors prior to placement, children avoiding medications due to taste or injections, and issues with a lack of support from the social workers. They also reported gaps in medication monitoring due to lack of communication between the previous foster care provider and the new placement. Although these barriers were encountered, foster care providers remained supportive of the children in their care

and demonstrated positive self-efficacy through continuing training, advocating for the children through the prescribers, and continuing to follow the treatment plan for the child.

Interpretation of the Findings

According to the San Bernardino County Foster Parents Handbook (2016), upon initial contact with the placement social worker, the foster care providers are provided information regarding the age, sex, health history, placement history (i.e., number of previous placements if applicable), problematic behaviors, and the reason why the child was removed. Many foster care providers expressed very little to no information in some of these areas as noted in the first theme of limited or no information. One foster care provider described the experience of taking in a new placement and feeling that the social worker purposely left out information regarding the child's health condition:

> First of all, I was told that the, I was told ah… when I got the phone call about the child that, that first… the person contacts you placement was at… oh this child is, you know he is just going to repeat things over and over again. And I'm thinking okay that's not a problem. You know a child who just repeats things over and over again, okay I'll just continue to redirect, that's it. This child… was clear, he was clearly off. This boy had seizures, ah he had some down syndrome, ah he was asthmatic, and he had a zip lock full of medications. So yes, he repeated things over and over again, but he didn't like the word, no, and he was very combative. And I thought, I was not told all of this. I wasn't even told about the medication. So, when he came… I'm thinking okay, you know. I could some… yeah you could visually you could see they're some issues. But again, I'm like okay we'll

> see. And so, you know he (muffled)… he um, he was obsessed with his, ugh…Xbox, whatever game he had. Cause they like to play games… they love to play video games. And he was obsessed with that and he wanted me to play with them. So, he for all… you know general purposes he just seemed okay, he was pleasant. Which they are um, so, when… when we sat down and finalized everything, I was given the bags of medication. And I don't think she understand all that was in there. Cause I'm like, I wasn't told that he was on any kind of meds. I was told that he just… repeated things over and over again. And I'm like okay that's fine. So, at this point I can't turn the boy away. So, I kept him and I'm going through all this stuff. And there were times you know… when he didn't want to take the medications, and I had to be real creative with that. It was just a lot and he didn't stay that long. So, I, I just couldn't do it. There was some information that was not given to me. So, I was being misled basically, they was just trying to get this child out of their office. (E5)

Having a discussion about the child's health and/or behavioral issues prior to placement allows the perspective foster care provider the ability to make decisions regarding their capability in properly caring for the child. Once the child is placed, the foster care provider must adhere to the needs of the child or come to terms with their inability to properly care for the child. Lack of information or not properly informing the foster care provider increases the risk of negative experiences by both the child and foster care provider. Furthermore, restricting health and/or behavioral information increases health risks for the child and nonadherence behaviors of foster care providers.

Stopping or Decreasing Medications/Overriding the Prescriber

In this study, foster care providers of children diagnosed with ADHD revealed differences in their perception, beliefs, and attitudes toward the advice of the prescriber than those care providers whose children were diagnosed with asthma, diabetes, or a seizure disorder as noted in the subtheme of ADHD medications can be stopped or decreased by foster care providers. According to foster care providers whose child was diagnosed with ADHD, it was believed that their opinion should override the prescribing physician's advice in the regulation of medications. One participant stated, "Should my opinion override… well yeah, he's in my care and I'm with him 24 hours so, I would say yes" (H8).

Those foster care providers who cared for children diagnosed with asthma opposed the idea that the opinion of the prescribing physician should be disregarded. When questioned if foster care providers should override the prescriber's opinion, a participant stated, "No cause he's the one, he's the one that has the knowledge of the medicine… you know he's prescribing it" (G7). This theme was unanimous among foster care providers whose children were diagnosed with a diabetic or a seizure disorder. In fact, this group of foster care providers believed that their opinion should be heard or taken into consideration as stated by a caregiver of child diagnosed with diabetes, "No… I just think it should at least be heard or taken into consideration… because I'm not a doctor" (N14).

As noted by Mirsadraee et al. (2012), asthma is a disorder that is common among children; it was a predominant inflammatory disorder reported in this study. Researchers

have noted negative beliefs regarding the treatment of asthma with inhaled corticosteroid medications are linked to medication nonadherence (Armstrong et al., 2014; McQuaid et al. 2012; Mirsadraee et al., 2012). There were similar findings in this study because Participant C3 stated, “Losing weight, that could be not healthy for him if he get below his weight;” furthermore, “It’s not natural to have that hyperactivity or not want to eat well or sleep” (D4).

My review of the literature revealed medication nonadherence included not filling the medication prescription (i.e., nonfulfillment adherence), nonpersistence (i.e., stopping the drug), and nonconforming (i.e., skipping doses) behaviors (Jimmy & Jose, 2011). Similar findings were also noted in this study. Nonconforming adherence behaviors were revealed as foster care providers described their beliefs and attitudes toward medications for children who were diagnosed with ADHD and asthma. Although following the prescribed medication regimen was a behavior all foster care providers agreed was important, foster care providers whose children were diagnosed with ADHD believed medication intervention was only useful while the child was attending school. Participant H8 stated:

> On the weekends I do not give him the medication cause I’m able to handle him on the weekends. But, as far as school, it’s too hard for the teacher to focus on one child, so I’ve experienced that in the past… so we want him to have enough dosage to get him through school.

Some foster care providers believed that children who were diagnosed with asthma only needed medications when the child was experiencing symptoms of the

diagnosis rather than a daily dose as recommended by the prescriber. Participant D4 stated the child in care was diagnosed with acute asthma and prescribed Albuterol for treatment at three times per day but stated, “Well she takes the medication only if she has the signs that she’s onset for asthma. So, other than that, she doesn’t have those signs she won’t take the asthma medication.”

Furthermore, the theme of stopping or decreasing medications continued to reveal medication nonadherence behaviors. Nonpersistence or the discontinuance of medications was a constant behavior demonstrated among those who managed medications for children in previous studies and was linked to the belief systems of caregivers in this study (see Brinkman et al., 2012; Desai & Oppenheimer, 2011; Hanghoj & Bosenm, 2013; Patel Shrimali et al., 2011). Upon experiencing minimal benefits of medication interventions, discontinuance led to nonadherence behaviors (Chappell, 2015; Gajria et al., 2014; Modi et al., 2011).

Nonpersistent behaviors were identified when foster care providers announced their ability to stop medications if there was a belief the child was no longer in need of the prescribed medications or if symptoms were no longer identified as noted in the subtheme of ADHD medications can be stopped or decreased by foster care providers. Participant I9 whose child was diagnosed with ADHD and schizophrenia stated, “I believe you should stop medication. I don’t believe that a child or even an adult should be on medication for the rest of their life.” Similarly, a foster care provider who cared for a child diagnosed with ADHD expressed the following:

> My beliefs are… if I see a positive result with the medicine while the foster child is taking them… then I see the results of that he doesn't really actually really need it anymore… then I would decrease it and that would more or likely put an end to it. But I would have to see that… (muffled) I would have to see it…since I'm dealing with him every day, since no…live with me now, so it's like I would have to see those signs… those results. If I don't see and no results… then… I still have to see the same thing every day since last year or so or whatever…but I got to continue to process it… continue it until I'm feel that until I see the results that he actually doesn't need to be on this anymore because I can tell… I can see the difference… he's showing signs that he's doing better… you know… he don't need it… (J10)

Limited Understanding of Medication and Side effects

Having a limited understanding of the medications and side effects, as noted in the first theme of limited or no information, was a familiar experience among the foster care providers. One foster care provider stated, "I was never told about side effects" of the child's medications (I9). In most instances, the prescribing physician provided information about the medications and side effects to the foster care provider. And in other scenarios when the side effects of medications were unknown and information was lacking, a foster care provider stated, "I didn't know anything about it. I actually Googled it, and then I realized what it actually does to help the child" (J10). Furthermore, some providers utilized the pharmacy or other means to obtain useful information regarding the medication and its side effects.

Most foster care providers were able to recognize and describe the child's experiences of the medication's side effects as familiarity developed. Moreover, many care providers were able to recognize the symptoms of the side effects, health concerns, and increased problematic behaviors as these issues began to manifest over time. Some foster care providers depicted those children diagnosed with ADHD as being "sluggish" and having dry mouth. One provider stated, "He would report that his mouth would be dry. He would report that he sometimes felt a little sluggish" (E5). Multiple foster care providers whose child was diagnosed with asthma reported the side effect of the medication made the child hyper:

> Well, when he's uh hyper. You know side effects is like… it gets him hyped up… so we know that he's…you know the side effects is like he's really… talking, talking… or running and running… you know… stuff like that. (G7)

Problematic Behaviors, Introduction of Medications, and Placement Instability

Previous studies described ADHD as the highest diagnosed psychological disorder among children in foster care (Klein, Damiani-Taraba, Koster, Campbell, & Scholz, 2015). Of the 15 participants in this study, the highest diagnosed psychological disorder was ADHD. A pattern of similar experiences among undiagnosed children who displayed problematic behaviors and entered new foster placement was revealed.

First, a child who was hyper and demonstrated problematic behaviors was diagnosed with ADHD. Next, the children were often prescribed medications for ADHD however, none of the foster care providers mentioned psychotherapy as a form of treatment for the children in this study. Furthermore, a common occurrence noted among

this group of children was placement instability. These children had previously encountered three or more placement which was the highest number of previous placements for children in this study. Problematic behaviors, diagnosis of ADHD, psychotropic medications, and placement instability was recognized as common occurrences in this study.

Furthermore, children were often diagnosed with ADHD and prescribed medications after initial placement as noted by Participant H8, "Well when I first received him, we didn't have any medication. So, once I received… I started an um… requested an assessment for medication. So, and when I received him, he didn't have any" and Participant I9 stated, "When he first came, he really wasn't on a medication. He was young, so they didn't put him on anything. I had to fight to get him on it." These findings correspond with the conclusions of Hancock (2015) who noted the likeliness of children to receive a clinical diagnosis after multiple placements.

Hyperactivity was mentioned by multiple foster care providers of children diagnosed with ADHD in this research study. Moreover, hyperactivity was found to be related to medication nonadherence in previous studies (Alavi & Calleja, 2012; Chappell, 2015; Malee et al., 2011). Furthermore, previous studies found behavioral problems led to psychiatric medications and placement disruptions; these findings were often revealed during the analysis of information in this study (Fisher et al., 2013).

Having experienced more than two placements in less than a year or more than four placements is viewed as placement instability (Jones, 2013; Lynch et al., 2014). Children in this study had averaged three placements and most were the age of 10 or

older. The children diagnosed with ADHD in this study were found to have a higher rate of previous placements or more than any other children in this study. Placement instability was discovered in this study and is a common experience noted among foster children in previous studies (Fisher et al., 2013).

Behavioral issues were a factor linked to placement instability in this research and other research studies (Fisher et al., 2013; Hancock, 2015; Stott, 2012). Moreover, foster care providers often cared for children who present difficult behavioral problems for which they were not properly trained (Murray et al., 2011). One foster care provider expressed similar experiences which led to the removal of the child from placement:

> Right. It was the… see the thing is that… I was not… I didn't feel like I was trained enough for that. And I felt like that… my house was not equipped to handle um, you know the magnitude that he… you know he needed more space even though my house is… is um, a nice size… um, he just need, he needed more space… he needed more space… we needed more space. And, this… this just didn't work. (E5)

Systemic Issues and the Inadequate Support from the Social Workers

According to the San Bernardino County Foster Parents Handbook (2016), foster care providers have 30 days to have the child assessed by a physician. Many providers state they were not equipped to provide the new physician with the child's health history, and some were not provided the HEP as stated:

> When I took him to the doctor, he didn't have that passport, health passport yet. Cause sometimes they don't provide it to you right away. Sometimes it takes a

> month it comes in the mail or the social worker give it to you…but not all the time every case is different, and every social worker works different too. So, um… I just provide the doctor the information that I have. (F6)

As mentioned in Theme 5, perceived barriers and the subtheme, systemic and medication access interferences, these systemic failures further impede the ability of the foster care provider to properly care for the child, restrict the physicians' ability to perform adequately, and increase health risks for the child. Moreover, previous studies have found that interferences regarding medication information and knowledge have led to barriers in medication adherence (Barnett et al., 2016a). Furthermore, pediatricians have encountered barriers in obtaining medical histories which has led to the delay in the treatment of the child and caused improper prescribing (AACAP, 2012; Barnett et al., 2016a; Cummings, 2012). Problematic prescribing could lead to problematic polypharmacy (AACAP, 2012).

An overview medication adherence issues among foster care providers were like the experiences, claims, and behaviors of biological parents and other non-foster providers found in previous studies. Nonfulfilment adherence was expressed by foster care providers who described various forms of interferences when attempting to access medications. Some conveyed interferences were due to the systemic issues regarding approval from the courts as in the case of Participant A1 who stated, "Just waiting on the courts to approve the meds or the changes" when questioned about interferences regarding medications.

The lack of support by social workers were continuously noted in this study and in previous studies (Murray et al., 2011). This form of systemic interference often led foster care providers to believe that assistance from the social worker was an issue, “Well the adequate help from the social worker regarding that is none existent…” (E5) and another foster care provider stated:

> I’m going to say with this child for the behavior and the circumstances why this child was is in care I’m going to say no they’ve been very tight lipped so I’m basically caring for a child that’s kind of like in the blind… (N14)

Although foster care providers felt adequate support was not provided, a few believed it was the duty of the foster care provider to advocate for the child. When questioned if the social worker was providing adequate assistance with the child, Participant F6 stated, “No. I just turn in everything to the social worker and I just have to do everything for the child. That’s my responsibility” and “Yeah, she does help. But, I’m all over it myself. So, yeah, she helps a little bit but, I have to be the advocate for that, or it won’t get handled properly” (H8).

The Health Belief Model

The HBM focuses on the attitudes and beliefs of people to develop an understanding of predictable health behaviors and uses that knowledge to create interventions (Chen et al., 2011; Ingram et al., 2013; Kawakami et al., 2014). The six constructs of the HBM were applied in this study to understand how foster care providers could (a) perceived susceptibility is the child susceptible to negative health condition due to medication nonadherence; (b) severity is the diagnosis, symptoms, side effects of the

medication, and consequences can be serious; (c) benefits – medication adherence will provide benefits by fixing the issue or reducing the seriousness to the child's health concern; (d) barriers – belief that proper medication adherence behaviors can be carried out without tangible or psychological interferences to the child or foster care provider; (e) cues to action – the ability to recognize symptoms of the disorder, side effects of medications, nonadherence behaviors and act accordingly; and utilize (f) self-efficacy – the ability to feel self-efficacious or competent in demonstrating successful medication adherence behaviors for the children in their care (Fulton et al., 1991; Ingram et al., 2013; Rosenstock et al., 1988).

Perceived Susceptibility

The HBM's theory regarding perceived susceptibility revolved around the ability of the foster care provider to relate medication nonadherence behaviors to rendering the child susceptible to the health concern. Several themes and statements were analyzed to conceptualize how foster care providers were able to relate proper medication adherence behaviors to an increase or decrease of symptoms the child may experience.

First, I explored how foster care providers responded to the question, "What is your understanding of medication adherence" (Appendix B). Foster care providers described medication adherence as physically administering medications and following the medication schedule, "The way that I administer the medicine to the child" (C3) and "That you adhere to the medication schedule. It's very important. If the doctor says this is the medication, this is the time, this is the amount you have to follow that direction exactly" (K11). Very few participants recognized follow-up visits and following a

specified diet (diabetes) as components of medication adherence which was previously defined and included in the definition of medication adherence by the WHO (Sabaté, 2003).

Next, I reviewed responses to the interview question, "What is the medication regimen or how often does the child take the medication(s)?" (Appendix B). The participants responses revealed the medication adherence procedures for each individual child's medications which included how medications were administered, regimented, and how special instructions for the specific medications were carried out. One foster care provider whose child was diagnosed with Type 1 diabetes described the following medications and regimen:

> Humalog every 4 hours, every 4 hours with food… before food, excuse me before food. And Lantus once a day at bed time. So, the Humalog can be administered up to six times including snacks… so let's say up to six times. (N14)

All foster care providers were able to provide the details of proper medication adherence for the children in their care. Medication nonadherence was described by the foster care providers when questioned about the child's health or behavior if the medication was missed as described in the subtheme, the effects of missed medications. Most believed the symptoms of the diagnosis would reappear if the medications were missed:

> I think they would become hyper. I think they would start acting out in ways that they were acting prior to taking that medication. I believe that they would revert back to the things that were happening to them prior to taking the medication.

> Probably, let's say if one was hearing voices or seeing people… those types of effects would start coming back and it would be signs of mental illness. (M13)

Foster care providers were able to perceive how medication nonadherence increased the risk of the child encountering a negative experience with the prescribed medication and/or increasing problematic behaviors which was a noted subtheme, negative behaviors for children diagnosed with ADHD. The foster care providers of children diagnosed with ADHD noticed an increase of negative behaviors when children missed a dose of medication and some received calls from the school:

> …the behavior from the school, and then the reports from the teacher. Like even at home if he's fighting and arguing with his siblings that mean… okay there's that's something we need to address with the medication or maybe he didn't even take it. (C3)

A foster care provider who cared for child with diabetes described beliefs about the effects of the medication, proper medication adherence, and nonadherence by stating:

> The child now have enough energy to move about they become more… happy, more agile, being able to play and also has to do with brain function… the brain now has enough glucose to function… helps the brain, the brain controls the body. I think that's a good thing. When you over... when it's too much medication… I'm sorry… not enough medication the body is now starved of sugar or glucose which can't make the body work so, the child can become sick, get ketoacidosis, and is life threatening and could kill the child if the child doesn't have the correct amount of medication of her insulin. (N14)

A review of all the data found in the themes and subtheme which include severity of diagnosis and symptoms, problematic behaviors for children diagnosed with ADHD, severity of medication side effects, medications and follow-up visits are beneficial, identifying negative changes and response to changes, identifying changes in behavior and side effects, responses to changes in behavior and/or adverse reactions to medications, medication adherence, and ability to maintain positive adherence reveal how foster care providers demonstrated knowledge of perceived susceptibility.

Foster care providers reported a general knowledge of medication adherence, developed an understanding of the medications and side effects, believed the diagnosis was serious enough to respond to changes in behavior, stated there was an understanding of the consequences for the child if medications were missed, and therefore could perceive how their actions of nonadherence or any other form of interference could cause the child to experience increased symptomology, severe health conditions, or in some cases, fatality. Thus, foster care providers were able to perceive susceptibility of negative health conditions due to medication nonadherence.

Perceived Severity

The severity of the diagnosis, symptoms, medication side effects, and consequences of medication nonadherence was the next component of the HBM analyzed in this research study. As indicated in Theme 2 - severity of diagnosis and symptoms, the majority of all foster care providers believed that the diagnosis which included ADHD, ODD, depression, asthma, schizophrenia, heart conditions, diabetes, and seizure disorders to be serious. Furthermore, some foster care providers believed children diagnosed with

ADHD were more destructive when medications were not administered, “Without the medication, yes. It can be very destructive” (C3). Notable behavioral problems were a continual theme among children diagnosed with ADHD as indicated under the subtheme, problematic behaviors for children diagnosed with ADHD.

Although foster care providers believed ADHD to be a serious diagnosis, none described their belief of the diagnosis to pose grave health consequences such as death. However, behavioral problems were noted as serious consequences. Due to the belief that ADHD does not inform life threatening consequences, it is possible to perceive why foster care providers may indulge in nonmedication adherence behaviors such as only providing medications during school days as described in the subtheme, no medications on weekends for ADHD. Furthermore, having a laxed view of consequences may suggest the reasoning why foster care providers believe they have the ability to override the prescriber’s advice regarding medication regimen as described in the theme ADHD medications can be stopped or decreased by foster care providers.

Asthma was believed to be a life threatening or fatal disorder, “It can be serious, yes and without this medicine, yes… it can be fatal to them. Cause he can stop breathing” (G7). The diabetic diagnosis was believed to be life changing and serious,

> I believe so… I believe its life changing because you have to be very, very alert of how the individual feels… and what that individual should be eating or drinking and got to make sure that they’re eating and hydrated. (L12)

Furthermore, foster care providers believed that the consequences of medication nonadherence could lead to severe harm to children diagnosed with diabetes.

The side effects of medications was believed to be serious among those diagnosed with asthma, diabetes, and a seizure disorder. This belief was indicated under the theme titled, severity of medication side effects. Regarding the side effects of the medications prescribed for asthma, many foster care providers reported an increased hyperactive mood and a reduced desire to eat or sleep, “Yeah I think so. It’s not natural to have that hyperactivity or not want to eat well or sleep” (D4). Side effects related to the medications for those diagnosed with a seizure disorder were noted to reflect drowsiness or lethargic moods. Although foster care providers viewed the diabetic medications side effects as serious, none reported having experienced any side effects of the medications. Finally, foster care providers did not believe the side effects of medications prescribed for children diagnosed with ADHD were serious.

When reviewing the themes related to severity of the diagnosis, behaviors, the side effects of medications, and consequences of each of these areas, it is clear that foster care providers believe that the children in their care have been diagnosed with serious conditions, some have severe problematic behaviors, some children may experience serious medication side effects, and most can suffer severe consequences related to each area of concern or medication nonadherence. Furthermore, the majority of the foster care providers believe that the consequences of the child’s diagnosis, symptoms, and the side effects of medications can be serious. The severity component of the HBM and the belief system for foster care providers in this study is important to understand as beliefs of severity triggers proactive or reactive behaviors as seen in this study and in previous studies (Chen et al., 2011).

Perceived Benefits

In the benefits component of the HBM, foster care providers revealed their belief that medication adherence would either fix the issues or reduce the seriousness to the child's health concern. All foster care providers were able to recognize the benefits of proper medication adherence for the children in their care. The theme, positive changes of behavior were noted among all the children in this study. Benefits experienced by children diagnosed with ADHD included positive changes in behaviors, a calm demeanor, more relaxed, less impulsivity, and good reports from school:

> It helps him by uh, concentrating. Helps him by thinking more. It helps him to relax, like, I mean… even sitting down watching tv used to be a task. Now he can actually watch a movie. Where we used to go to a movie theater, and he would get up 10 or 11 times. (B2)

Foster care providers of children diagnosed with asthma reported benefits in the health condition such as easier breathing, relieved coughing and wheezing, and ability to play without breathing issues:

> The benefit is that he can breathe good, that he can function. You know he can go to school and you know…play and do well as everyone else does and breathe… and his breathing is good. You know… he gets the oxygen that he needs in his lungs. (G7)

Those diagnosed with diabetes revealed benefits in increased energy, mood, being happy and "Benefits are he's able to live a full life" (L12). Finally, benefits for children diagnosed with a seizure disorder noted the ability of the doctor to lower medication

dosage which resulted in increased energy and being seizure free. Furthermore, foster children expressed having received benefits from the medications by stating, “Oh he just say that, he recognize that, that he more calmer now” (B2).

The perceived benefits component of the HBM revealed foster care providers were able to understand the relationship between poor medication adherence and proper medication adherence as it relates to the benefits of the child’s health concern. Foster care providers believed communicating with the child’s prescriber was beneficial. Most described the follow-up visit with the child’s physician as a way to communicate issues or concerns. When foster care providers followed the prescriber’s directions, they were able to note beneficial changes to the child’s health condition. All foster care providers agreed that the child’s follow-up visits were important and often found the information or advice from the doctor to be a benefit as noted in the theme medications and follow-up visits are beneficial.

Perceived Barriers

The belief that proper medication adherence behaviors can be carried out without tangible or psychological harm to the child were aspects of the HBM analyzed in this study. Multiple interferences to proper medication adherence behaviors for foster care providers were discovered in many areas of analysis which included the intake process and within the six components of the HBM’s theories. As described in the theme perceived barriers, interferences to medication adherence were broadly apparent during the first contact with the placement social worker. In the initial contact, the placement

social worker often provided limited information to the perspective foster care provider regarding health concerns and behavioral issues of the child.

As the theme of limited information was investigated, foster care providers expressed interferences in gaining access to medical history or not having access to the HEP as indicated in the subtheme limited information or health passport education information. Due to the barriers of having limited information, foster care providers often incurred issues with providing up to date medical or health information to the new physician. Moreover, limited information or access to medical history created barriers for new prescribers in instances where the child's health history was needed to make appropriate diagnosis and medication prescription intervention decisions.

Another barrier discovered among foster care providers was noncommunication between foster care providers and the previous caregiver as identified in the subtheme, no communication with previous caregiver. Furthermore, foster care providers rarely experienced the ability to obtain health and behavioral information from the biological parent. One child experienced three months of symptoms before the foster care provider discovered the child was previously diagnosed with a seizure disorder. In obtaining the medical history from the biological parent, the seriousness of the illness was discovered:

> That happened within 3 months… 3 months. But once the parent had gave me the history… like the notes from the hospital… that would have been very imperative to have prior to placement because the child was very sick… and once I read through her paperwork I saw how detailed her illness was. And at first it was just, child was placed in the home due to parent medical neglect and that was it… all

> we got and once the child was in my home and… caring for her, she got sicker and sicker and just found out it was a lot more to her… she was very ill. (N14)

Although noncommunication between the current and previous foster care providers were unanimously experienced, some foster care providers believed having such communication would have been beneficial. In one instance, the foster care provider (N14) stated, "Not medication but definitely behavior" information from the previous caregiver would have been helpful. The noncommunication factor between foster care providers and the previous caregivers/biological parents created barriers in obtaining health and behavioral information for the child. This type of information proved to be a critical component to identifying the diabetic crisis for the child previously described by N14.

The belief of some foster care providers regarding the medication regimen also created barriers to medication adherence for foster children. Those foster care providers who cared for children diagnosed with ADHD were found to have a more relaxed view of the diagnosis, medications, and the side effects of the medications. Although ADHD was perceived as a serious diagnosis, foster care providers neglected to administer medications on the weekends due to the belief that the medication was not needed as noted in the subtheme, no medications on weekends for ADHD. Furthermore, one of the four foster care providers whose child was diagnosed with asthma described stopping medication administration once the symptoms the diagnoses were no longer apparent:

> I didn't give him the medicine; I say oh I'm going to check. And then after like three days later, I found out that he was coughing, he got sick, he got… he got a

> little bit worse and I took him to the doctor, and I told her that I thought this was already disappear. And now he's coughing again and (inaudible) so that, that's why I know why…that it benefiting him um… to have the medicine. (F6)

Although all foster care providers whose children were diagnosed with asthma described the medication regimen as an "as needed" basis, all experienced an increase of symptoms when medication intervention ceased upon the belief that the child received the full benefit of the medication. This was a common experience in previous study where asthmatic children only reacted to the symptoms of the diagnosis rather than being proactive in their adherence to the medication regimen (Vasbinder et al., 2016). Susceptibility to the symptoms of asthma increases with reactive or nonadherence behaviors (Vasbinder et al., 2016). As a result, the beliefs of foster care providers have led to reactive behaviors that result in barriers to medication adherence and increase risk of harm to the child.

Other barriers to medication adherence were described when a few foster care providers noted pharmacy issues, "And sometimes we have to wait on a time period, three or four days without medication due to refill" (H8). This subtheme was not as prevalent as the systemic themes noted in this study. The subtheme, systemic and medication access interferences issues further described the types of interferences with social workers. One foster care provider who was unsuccessful at acquiring access to proper equipment for an asthmatic child stated, "So, when that happened the social worker couldn't help me out with that. What I did, is that I called the doctor that I take

my foster kids and set up an appointment" (F6). And in another instance when the social worker did not feel that the child required medication:

> I just recall the worker saying that she didn't think he needed it. I recall her saying that and I thought, well let me be the judge of that. You know because he's going to make my home. So, she said I don't really think he needs it…you know he's a good kid…and I thought okay, well we'll see. I said, we'll just go with the plan for now. And just see. And then when I have my visit with the doctor and then we'll just go from there. And then he's been on (mumbled). That was the only thing that kind of raised my eyebrows for me. (E5)

Medication regimens were not found to have an impact on medication adherence in this study as previously found in other studies (Chappell, 2015; Gajria et al., 2014; ModI et al., 2011). However, negative beliefs regarding medication interventions and/or administering multiple medications to children posed barriers to medication adherence for some foster care providers. This form of intervention was against a few foster care providers beliefs and furthermore, many foster care providers believe that children can grow out of behavioral issues without medications as noted in the subtheme, children can Be weaned off medications:

> Again, as I stated. I am not a big fan of children being on medications. I feel like if it's not a direct… you know that it's a heart medication for heart murmur, or seizure medication, you know those things… but, when it comes to behaviors that are not to be found that serious, I don't see why we're medicating our kids. Again, I think that they'll grow out of it. You know, you just have to challenge their

> behavior. And I don't think challenging it or chemically changing it… the balance of a child is what they need to do. And you run the risk of children becoming chemically dependent on these things and that's another issue. (E5)

Additionally, previous studies found biological parents believed that medications would stunt the growth of the child (Bai et al., 2015; McGrady et al., 2015; Mirsadraee et al., 2012). Although most foster care providers believed that the medications the children were prescribed were working, a few agreed with the idea that there may be other interventions or medication options such as meditation and the use of Wholistic drugs (marijuana). Only one foster care provider mentioned the belief that medications stunt the growth of the child, "I would hope that there is some other medication or other form of treatment would be beneficial to the child because the… in my opinion the medication that was given stunted her development" (O15).

Finally, perceived barriers to medication adherence experienced by foster care providers were created by the resistance of the foster child in a few instances. Children simply did not want to take the medications, J10 explained, "He just complains he doesn't want to take it" which was a common statement made by foster care providers. Some children advised feeling abnormal as expressed by M13, "She wants to be normal… she wants to be like other kids…she wants to be able to what her friends do, and her medication limits her" Previous studies also noted children not liking medications, disliking the taste of medications, and feeling abnormal (Armstrong et al., 2014; Hanghoj & Bosenm, 2013; MacDonell et al., 2013; McGrady et al., 2015; Patel Shrimali et al., 2011). Furthermore, some children diagnosed with diabetes disliked being

poked by needles which caused the foster care provider to become hesitant to administer medications.

The Foster Care Bill of Rights (2016) presents the California Welfare and Institution Code §16001.9, ARC 58, Res. Chap. 150, and states foster children are to be free from medications unless authorized by a physician. This code restricts foster care providers from administering medications that are not prescribed by a physician and creates barriers when children resist medications. In one scenario, a foster care provider was deterred by this code in an emergency situation:

> Well one time he and his sister decided to, not take the shot after the… we had cut their food so they would eat and so you would give them their food and then we'd give the shot after 5 minutes before they'd start eating so the insulin would start kicking in and after we give them the food… they'd decided to say we're not eating… If he didn't take the medication his sugar would drop too low and he would actually, the little boy ended up having night terror. And so, we had to call 911 because he wasn't waking up. And then the medic says well you need to stuff sugar pill in his mouth… you know, get him to drink the juice, do something, and I'm like we can't, he's foster were not allowed to do that, so what can I do… he's like then the only other option is to call 911… (L12)

The multiple barriers and perceived barriers to proper medication adherence behaviors have manufactured medication nonadherence behaviors for foster care providers. Medication nonadherence behaviors of foster care providers increase susceptibility to the symptoms of the diagnosis and further harm of the child (Jimmy &

Jose, 2011). Evidence of barriers identified in this study reveal how foster care providers experience difficulties to proper medication adherence behaviors.

Cues to Action

In the theory of the HBM, cues-to-action are determined by the ability of a person to readily act. I applied this theory to the foster care providers ability to recognize symptoms of the disorder, side effects of medications, nonadherence behaviors and act accordingly. By applying this theory, I discovered foster care providers were able to recognize changes in the behaviors and health condition of children when medication nonadherence behaviors were demonstrated or when side effects of medications became an issue as described in the theme, identifying negative changes and response to changes. Common signs that triggered cues to action were an increase of problematic behaviors and impulsivity among children diagnosed with ADHD, problematic respiratory symptoms of those diagnosed with asthma, a rise or decline of blood sugar in those children diagnosed with diabetes, and children who experienced seizures were noted to become very ill if medications were missed. These themes were identified in the subtheme identifying changes in behavior and side effects.

When responses to changes in behavior and/or adverse reactions to medications began to occur, most took notes of the episodes, monitored the change, and tried to determine why the change was taking place, “I try to find out what’s changing. Is it a good change or a bad change?” (C3). Others called the doctor or nurse to schedule an appointment with the prescriber. After gaining knowledge in the areas of the child’s diagnosis, medications, and the side effects of the medications, foster care providers

performed in an appropriate manner and took the appropriate steps to maintain the child's health.

Self-Efficacy

The HBM's theory of self-efficacy looks at the successful action of the person or the person's belief that the action will be successful (Ingram et al., 2013; Rosenstock et al., 1988). Upon experiencing barriers to medication adherence, foster care providers revealed the need to advocate or demand knowledge regarding the child's health care needs. All foster care providers in this study were aware of proper medication adherence behaviors. Many earned their knowledge of medication adherence through trainings, parenting classes, hospital trainings, first aid classes, and other sources such as college courses. Some foster care providers who cared for children with special needs were educated by the prescribing doctor or through classes specifically designed for the child's diagnosis:

> Before the child could be placed into my home I had to go to the child's doctor and the doctor, or the nurse would explain to me about the medications that she was on… and then I would get medically trained for that child's special needs… (M13)

Foster care providers were able to choose classes according to the needs of the child and required to undertake a set number of hours for training annually. The majority of the foster care providers were not directly trained by the child's doctors or hospitals however, their trainings were limited to noncredit college courses. Classes varied in

topics from everyday behaviors and common health issues to mildly complicated behaviors and health concerns as described:

> So, we're to take 15 hours a year of the medical training, and you usually gear that toward the condition of the child that you have in your home at the time. So, you can watch videos, you can take a course, you can read a book and write a report. (K11)

Although foster care providers were required to attend training courses to increase their knowledge, many felt they were not properly trained for the behavioral issues encountered. Many complained about that there were no trainings or that they have not received training, "No training" (H8). Some stated that they had to seek out training on their own, "Oh, there is none. (crosstalk)…You better get it on your own." (E5). Previous studies also noted limited trainings as barriers to medication adherence (Mosuro et al., 2014). The lack of training did not pose a threat to self-efficacy due to the resiliency of the foster care providers. Positive self-efficacy behaviors proved to be a sustaining factor as foster care providers gained knowledge through other means or outside of courses offered by the county.

By advocating for and gaining adequate health care information, foster care providers demonstrated self-efficacy. Some foster care providers experienced having to "fight" to get proper care for the child, "I had to fight to get him on it" (I9). Most agreed that their efforts in maintaining proper medication adherence contributed to the positive outcomes for the children in their care. Finally, by continuing to successfully adhere to

the child's treatment plan, foster care providers expressed how they experienced self-efficacy.

Limitations of the Study

This study focused on the experiences of 15 foster care providers who cared for foster children diagnosed with a mild to chronic health concern, prescribed medications for the health concern, experienced one or more placements, and children in the current placement for a minimum of 3 months. Participants were representative of two major counties in the United States and all spoke English. Due to the restricted requirements and the use of anonymity, transferability is limited. Moreover, anonymity provided participants the ability to speak freely however, due to the sensitive nature of this study, some participants may not have felt completely open to divulge information.

The sample was limited to foster care providers only. After the interview and analysis process, two types of foster care licenses were discovered among caregivers in this study. The differences between the two types of licenses were trainings and level of care for the child according to the participants in this study. Foster care providers who held a special license to care for children deemed medically fragile by the county received direct training from the doctor, nurse, or hospital. Due to these findings, future studies may find it beneficial to limit the study to those foster care providers who have the same type of licensing.

Recommendations

This study captured the experiences of foster care providers who cared for children diagnosed with a mild to chronic health disorder. Through the expressions of

these experiences' insights into the perceptions, beliefs, and attitudes of foster care providers toward the diagnosis, medications, and behaviors of foster children were revealed. With this knowledge, I recommend future studies explore the relationship between medication nonadherence and placement instability for children in foster care.

Furthermore, ADHD was recognized as the highest-ranking psychological disorder among children in foster care and the highest diagnosed behavioral disorder found in this study (Klein et al., 2015). A study on the perceptions, beliefs, and attitudes of foster care providers toward caring for foster children who present problematic behaviors or have been diagnosed with ADHD may generate more knowledge as it relates to medication nonadherence and placement instability. Understanding the perceptions, beliefs, and attitudes of foster care providers toward caring for children who present problematic behaviors may give insight into reasons why foster children encounter placement instability and medication nonadherence.

Additionally, monotherapy treatment for ADHD disorders is a common practice however, this form of intervention is not recommended by practitioners (Olfson et al., 2014; Solchany, 2012). The participants in this study all described the medications as the only form of intervention for those children diagnosed with ADHD. There was no mention of psychotherapy or other additional forms of intervention for children diagnosed with ADHD. A study focusing on the outcomes of foster children who receive therapy versus those who receive dual therapy for ADHD or problematic behaviors may fill the gap of knowledge in this area.

This study discovered how the perceptions, beliefs, and attitudes of foster care providers influenced medication adherence behaviors for children who had experienced multiple placements. Future studies may edify knowledge by exploring how perceptions, beliefs, and attitudes toward children diagnosed with ADHD effect the decision-making process prior to a child with problematic behaviors are placed and removed. Furthermore, interviewing the foster child and social worker may further this study's findings.

Although foster care providers believed the problematic behaviors of the child could be managed without medications on the weekends, the providers continued to receive calls from child's school regarding problematic behaviors. Future studies may provide an understanding of how these phenomena among foster care providers are similar or the same for non-foster care providers. Moreover, a study focusing on the behaviors of non-foster children who do not received ADHD medications on the weekends due to nonadherence behaviors of the parent.

Implications

Social change implications can be applied to the social services, health and clinical communities. Based on the findings, the department of social services, social workers, and affiliates will find the results of this study to be an important tool for understanding gaps in the monitoring, transitioning, regulating, and maintaining of medications prescribed to foster children. Moreover, the findings in this study can be utilized to create trainings and/or psychoeducational intervention programs for foster care providers who have a need to understand the importance of good medication adherence behavior. Previous studies have shown psychoeducational intervention programs

improved medication adherence behaviors and clinical symptoms of children diagnosed with ADHD (Bai et al., 2015).

Barriers to medication adherence were found in the lack of or missing information provided to foster care providers. The department of social services and social workers may utilize the findings of this study to retrain, reinforce, and restructure protocol for informing foster care providers. Additionally, bridging the health information gap between past and current foster care providers and biological parents may increase the chances of children receiving adequate health care. It is critical that health and behavioral information of the child be provided to foster care providers.

Physicians, nurses, health care providers, community organizations, public health agencies, and health educators can integrate the information revealed in this study into current trainings to reinforce the importance of informing foster care providers of the knowledge pertaining to proper medication adherence. In addition, those in the clinical communities such as clinical social workers, psychologists, and psychiatrists can access information found in this study to better understand the beliefs of foster care providers regarding their approach to addressing medication and behavioral issues of foster children. Having such knowledge affords clinicians the ability to form intervention plans that will better serve the children and improve long-term outcomes.

Conclusions

Proper medication adherence behaviors are a vital component of health care for foster children of mild to chronic health conditions. With the increase of children entering into the foster care system and a rise in psychotropic medication use among this

population of children, it is important for foster care providers to remain open minded to possible health care concerns and/or behavioral issues of some children prior to accepting the placement. Moreover, it would be beneficial for foster care providers to educate themselves in the areas of medications, side effects of medications, follow-up visits, and problematic behaviors of the children they intend to provide care for prior to accepting the child into care (Schubart et al., 2014).

It is the perceptions, beliefs, and attitudes of the foster care provider that have motivated the behaviors of medication adherence or nonadherence for children in foster care. Moreover, foster care providers must equip themselves with the courage to advocate for information regarding the child's health history, behavioral information, and previous placement information. Having up-to-date health information will increase the chances of successful diagnosis, medication intervention planning, and medication adherence behaviors.

This research study was able to capture the lived experiences of foster care providers who cared for children of mild to chronic health concerns and utilized the six concepts of the HBM to understand how these experiences motivated medication adherence or nonadherence behaviors. The theme of perceived susceptibility was noted after foster care providers realized the negative effects of medication nonadherence on the children in their care. An increase of the diagnosed symptoms and negative behaviors often cued the foster care provider to react by calling the prescriber and initiating a well check visit.

Providers experienced children entering their homes without a diagnosis, medications, and a clear plan to remedy health or behavioral issues. Many foster care providers believed they were misinformed or misled by the social worker during initial placement and believed they were left to advocate for children who they were ill-equipped to successfully provide care. In some cases, foster care providers encountered barriers to the access, administration, and monitoring of medications. When foster care providers faced interferences to medication adherence, medication nonadherence behaviors were demonstrated. Moreover, interferences to due to lack of communication between previous caregivers and current foster care providers increased risks for nonadherence behaviors. These issues have the potential to cause further harm to children and increase the risk of producing adults with mental health issues (Schubart et al., 2014).

The belief that the diagnosed disorders were severe, and some side effects of medications were severe was a consistent theme among foster care providers. However, medication nonadherence was perceived to be acceptable by those foster care providers whose child was diagnosed with ADHD. Since asthma, diabetes, and seizure disorders can cause fatal results, it is possible that foster care providers did not perceive the diagnosis and medications for ADHD as serious as those children diagnosed with asthma, diabetes, and a seizure disorder. For foster care providers of children diagnosed with ADHD, it was the problematic behaviors deemed to be “serious” rather than the health condition itself.

All foster care providers agreed that there were benefits gained from proper medication adherence behaviors. Benefits were acknowledged by the child’s schools,

others who encountered the child, and the child's prescribers. Positive behaviors and healthy children are the desired goals for all foster children who are diagnosed with a health condition (DCHS, 2015). The benefits gained by adhering to follow-up visits were discovered within the theme follow-up visits allow caregivers to communicate with doctor. As indicated in this theme, many foster care providers stated they were happy with the communication and their experience with the child's providers. These encounters with the child's physicians and the advice provided was believed to be beneficial for the wellbeing of the child. Furthermore, foster care providers believed the follow-up visits were an important component of medication adherence which allowed opportunities for communicating any concerns.

Overall, foster care providers revealed very detailed information about their perceptions, beliefs, and attitudes of medication adherence, nonadherence, and experiences with children in their care. When faced with adverse issues and barriers, self-efficacy was demonstrated by continuing to successfully advocate for the children in their care. Some foster care providers experienced great results after advocating for their children however, there were a few who were not as successful in gaining positive outcomes.

For these reasons, it is critical to further research medication adherence in foster care, barriers to successful care for foster children from the views of foster care providers, and how medication management refinement in the foster care system can successfully alter the future of children in a positive manner. Without regulation of medication adherence in foster care and the monitoring of medications during the child's

transitions from placement to placement, children will continue to encounter the negative effects of medication nonadherence just as Gabriel Myers and other foster children have suffered.

References

Alavi, Z., & Calleja, N. G. (2012). Understanding the use of psychotropic medications in the child welfare system: causes, consequences, and proposed solutions. *Child Welfare, 91*(2), 77-94.

American Academy of Child & Adolescent Psychiatry. (2012). *A guide for community child serving agencies on psychotropic medications for children and adolescents.* Retrieved from http://www.aacap.org/app_themes/aacap/docs/press/guide_for_community_child_serving_agencies_on_psychotropic_medications_for_children_and_adolescents_2012.pdf

Armstrong, M. L., Duncan, C. L., Stokes, O., & Pereira, D. (2014). Association of caregiver health beliefs and parenting stress with medication adherence in preschoolers with asthma. *Journal of Asthma, 51*(4), 366-372. doi:10.3109/02770903.2013.876431

Aylward, B. S., Rausch, J. R., & Modi, A. C. (2015). An examination of 1-year adherence and persistence rates to antiepileptic medication in children with newly diagnosed epilepsy. *Journal of Pediatric Psychology, 40*(1), 66-74.

Bai, G., Wang, Y., Yang, L., & Niu, W. (2015). Effectiveness of a focused, brief psychoeducation program for parents of ADHD children: Improvement of medication adherence and symptoms. *Neuropsychiatric Disease and Treatment, 11*, 2721.

Barnett, E. R., Boucher, E. A., Neubacher, K., & Carpenter-Song, E. A. (2016). Decision-making around psychotropic medications for children in foster care: Perspectives from foster parents. *Children and Youth Services Review, 70*, 206-213. doi:10.1016/j.childyouth.2016.09.012

Barnett, E. R., Butcher, R. L., Neubacher, K., Jankowski, M. K., Daviss, W. B., Carluzzo, K. L., & Yackley, C. R. (2016). Psychotropic medications in child welfare: From federal mandate to direct care. *Children and Youth Services Review,* 669-717. doi:10.1016/j.childyouth.2016.04.015

Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research*, *15*(2), 219-234.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Brenner, S. L., Southerland, D. G., Burns, B. J., Wagner, H. R., & Farmer, E. Z. (2014). Use of psychotropic medications among youth in treatment foster care. *Journal of Child and Family Studies, 23*(4), 666-674. doi:10.1007/s10826-013-9882-3

Brinkman, W. B., Sherman, S. N., Zmitrovich, A. R., Visscher, M. O., Crosby, L. E., Phelan, K. J., & Donovan, E. F. (2012). In their own words: Adolescent views on ADHD and their evolving role managing medication. *Academic Pediatrics*, *12*(1), 53-61.

Brown, M. T., & Bussell, J. K. Medication adherence: *WHO cares?.* In Mayo Clinic Proceedings 2011 (Vol. 86, No. 4, pp. 304-314)

California Department of Social Services and Department of Health Care Services. (2015). *California guidelines for the use of psychotropic medication with children and youth in foster care*. Retrieved from http://www.dhcs.ca.gov/provgovpart/pharmacy/Documents/QIP_Guidelines.pdf

Camp, A. R. (2011). A Mistreated Epidemic: State and Federal Failure to Adequately Regulate Psychotropic Medications Prescribed to Children in Foster Care (2011). 83 Temple L. Rev. 369 (2011); University of Baltimore School of Law Legal Studies Research Paper No. 2011-3. Available at SSRN: https://ssrn.com/abstract=1567682

Carpenter, C. J. (2010). A meta-analysis of the effectiveness of health belief model variables in predicting behavior. *Health Communication*, *25*(8), 661-669. doi:10.1080/10410236.2010.521906

Chakrabarti, S. (2014). What's in a name? Compliance, adherence, and concordance in chronic psychiatric disorders. *World Journal of Psychiatry*, *4*(2), 30.

Chappell, F. (2015). Medication adherence in children remains a challenge. *Prescriber*, *26*(12), 31-34.

Charach, A., Yeung, E., Volpe, T., & Goodale, T. (2014). Exploring stimulant treatment in ADHD: Narratives of young adolescents and their parents. *BMC Psychiatry*, *14*(1), 110.

Chasnoff, I., Wells, A., & King, L. (2015). Misdiagnosis and missed diagnoses in foster and adopted children with prenatal alcohol exposure. *Pediatrics*, *135*(2), 264-270.

Chen, M. F., Wang, R. H., Schneider, J. K., Tsai, C. T., Jiang, D. D. S., Hung, M. N., & Lin, L. J. (2011). Using the health belief model to understand caregiver factors influencing childhood influenza vaccinations. *Journal of Community Health Nursing*, *28*(1), 29-40.

Child Trends. (2017). State level data for understanding child welfare in the United States: California. https://www.childtrends.org/wp-content/uploads/assets/child-welfare/pdf/state_profiles/foster/California.pdf

Chong, W. W., Aslani, P., & Chen, T. F. (2013). Health care providers' perspectives of medication adherence in the treatment of depression: A qualitative study. *Social Psychiatry and Psychiatric Epidemiology*, *48*(10), 1657-1666. doi:10.1007/s00127-012-0625-3

Collazo, C. (2013). *Placement instability in the foster care system: A study framed by attachment theory* (Order No. 1539216). Retrieved from ProQuest Dissertations & Theses Global. (UMI No. 1411382197)

Conradi, J. (2016). A new war on drugs: Fighting state-sponsored overmedication of California's foster youth. *Golden Gate University Law Review.*, *46*, 87.

Cummings, M. M. (2012). Sedating forgotten children: How unnecessary psychotropic medication endangers foster children's rights and health. *Boston College Journal of Law & Social Justice*, *32*, 357.

Dahn, V. L. (2013). *A qualitative study of caregiver training in administration of psychotherapeutic medications to male foster children* (Order No. 3575234). Retrieved from ProQuest Dissertations & Theses Global. (UMI No. 1459884023)

Davidsen, A. (2013). Phenomenological approaches in psychology and health sciences. *Qualitative Research in Psychology, 10*, 318-339. doi:10.1080/14780887.2011.608466

Demonceau, J., Ruppar, T., Kristanto, P., Hughes, D., Fargher, E., Kardas, P., & Vrijens, B. (2013). Identification and assessment of adherence-enhancing interventions in studies assessing medication adherence through electronically compiled drug dosing histories: A systematic literature review and meta-analysis. *Drugs, 73*(6), 545-562. doi:10.1007/s40265-013-0041-3

Department of Children & Family Services. (2013). DCFS online policies and procedures. *Health*. Retrieved from https://www.sccgov.org/ssa/opp2/15_health/15-1.html

Desai, M., & Oppenheimer, J. J. (2011). Medication adherence in the asthmatic child and adolescent. *Current Allergy and Asthma Reports*, *11*(6), 454-64. doi:10.1007/s11882-011-0227-2

dosReis, S., Tai, M., Goffman, D., Lynch, S., Reeves, G., & Shaw, T. (2014). Age-related trends in psychotropic medication use among very young children in foster care. *Psychiatric Services*, *65*(12), 1452-1457.

Duerden, M., Avery, T., & Payne, R. (2013). *Polypharmacy and medicines optimisation. Making it safe and sound*.

Everson-Hock, E. S., Jones, R., Guillaume, L., Clapton, J., Goyder, E., Chilcott, J., & Swann, C. (2012). The effectiveness of training and support for carers and other professionals on the physical and emotional health and well-being of looked-after

children and young people: A systematic review. *Child: Care, Health & Development, 38*(2), doi:10.1111/j.1365-2214.2011.01247.x

Fisher, P. A., Mannering, A. M., Van Scoyoc, A., & Graham, A. M. (2013). A translational a neuroscience perspective on the importance of reducing placement instability among foster children. *Child Welfare*, 92(5), 9-36.

Fisher, P. A., Stoolmiller, M., Mannering, A. M., Takahashi, A., & Chamberlain, P. (2011). Foster placement disruptions associated with problem behavior: Mitigating a threshold effect. *Journal of Consulting and Clinical Psychology*, *79*(4), 481–487. doi:10.1037/a0024313

Foltz, R. R., & Huefner, J. (2013). The subjective experience of being medicated in troubled youth: A sample from residential treatment. *Journal of Child & Family Studies*, 23(4), 752-763. doi:10.1007/s10826-013-9842-y

Font, S. A. (2014). Kinship and nonrelative foster care: The effect of placement type on child well-being. *Child Development*, *85*(5), 2074-2090.

Fontanella, C. A., Gupta, L., Hiance-Steelesmith, D. L., & Valentine, S. (2015). Continuity of care for youth in foster care with serious emotional disturbances. *Children and Youth Services Review*, *50*, 38-43. doi:10.1016/j.childyouth.2015.01.004

Fontanella, C. A., Hiance, D. L., Phillips, G. S., Bridge, J. A., & Campo, J. V. (2014). Trends in psychotropic medication use for Medicaid-enrolled preschool children. *Journal of Child and Family Studies*, *23*(4), 617-631. doi:10.1007/s10826-013-9761-y

Fontanella, C. A., Warner, L. A., Phillips, G. S., Bridge, J. A., & Campo, J. V. (2014). Trends in psychotropic polypharmacy among youths enrolled in Ohio Medicaid, 2002–2008. *Psychiatric Services, 65*(11), 1332-1340. doi:10.1176/appi.ps.201300410

Fulton, J. P., Buechner, J. S., Scott, H. D., DeBuono, B. A., Feldman, J. P., Smith, R. A., & Kovenock, D. (1991). A study guided by the health belief model of the predictors of breast cancer screening of women ages 40 and older. *Public Health Reports, 106*(4), 410–420.

Gajria, K., Lu, M., Sikirica, V., Greven, P., Zhong, Y., Qin, P., & Xie, J. (2014). Adherence, persistence, and medication discontinuation in patients with attention-deficit/hyperactivity disorder–A systematic literature review. *Neuropsychiatric Disease and Treatment, 10*, 1543.

Glanz, K., Rimer, B., & Lewis, F. (2008). *Health behavior and health education: Theory, research and practice.* San Francisco, CA: Wiley.

Goodyear, L., Barela, E., Jewiss, J., & Usinger, J. (Eds.). (2014). *Qualitative inquiry in evaluation: From theory to practice* (Vol. 29). John Wiley & Sons.

Greeno, E. J., Lee, B. R., Uretsky, M. C., Moore, J. E., Barth, R. P., & Shaw, T. V. (2016). Effects of a foster parent rraining intervention on child behavior, caregiver stress, and parenting style. *Journal of Child and Family Studies, 25*(6), 1991-2000.

Grossoehme, D. H. (2014). Overview of qualitative research. *Journal of Health Care Chaplaincy, 20*(3), 109-122.

Hancock, S. A. (2015). *Number of placements, age at first placement, and history of Abuse/Neglect on potential predictors for depressive disorders for children in treatment foster care* (Order No. 1588508). Retrieved from ProQuest Dissertations & Theses Global. (UMI No. 1686537375)

Hanghoj, S., Boisen, K. (2013). Self-reported barriers to medication adherence among chronically ill adolescents: A systematic review. *Journal of Adolescent Health*, *54*(2), 121-138. doi:10.1016/j.jadohealth.2013.08.009h

Harrison, J., Cluxton-Keller, F., & Gross, D. (2012). Antipsychotic medication prescribing trends in children and adolescents. *Journal of Pediatric Health Care*, *26*(2), 139-145.

Hilt, R. (2014). Polypharmacy monitoring. *Brown University Child & Adolescent Behavior Letter, 30*(8), 8.

Hinshaw, S. P., Arnold, L. E., & For the MTA Cooperative Group. (2015). ADHD, multimodal treatment, and longitudinal outcome: Evidence, paradox, and challenge. *Cognitive Science*, *6*(1), 39–52. doi:10.1002/wcs.1324

Hochbaum, G., Rosenstock, I., & Kegels, S. (1952). Health belief model. *United States Public Health Service*. Retrieved from http://www.infosihat.gov.my/infosihat/artikelHP/bahanrujukan/HE_DAN_TEORI/DOC/Health%20Belief%20Model.doc

Hornstein, E. P. (2014). Do ‘accidents’ happen? an examination of injury mortality among maltreated children. *Dissertation Abstracts International Section A,* 74.

Howle, E. (2016). California's foster care system: The state and counties have failed to adequately oversee the prescriptions of psychotropic medications to children in foster care. California State Auditor. Retrieved from https://www.auditor.ca.gov/reports/summary/2015-131

Houghton, F., & Houghton, S. (2018). An Appraisal of Thematic Analysis: Warts and All. *AISHE-J: The All Ireland Journal of Teaching and Learning in Higher Education*, *10*(2).

Ingram, J., Cabral, C., Hay, A. D., Lucas, P. J., & Horwood, J. (2013). Parents' information needs, self-efficacy, and influences on consulting for childhood respiratory tract infections: A qualitative study. *BMC Family Practice*, *14*(1), 106-114. doi:10.1186/1471-2296-14-106

Jaudes, P. K., Bilaver, L. A., & Champagne, V. (2015). Do children in foster care receive appropriate treatment for asthma? *Children and Youth Services Review*, *52*, 103-109.

Jimmy, B., & Jose, J. (2011). Patient medication adherence: Measures in daily practice. *Oman Medical Journal*, *26*(3), 155–159. doi:10.5001/omj.2011.38

Johnson, A. C. (2012). *The lived experience of the adult African American female who has lived in multiple foster care placements* (Order No. 3518439). Retrieved from ProQuest Dissertations & Theses Global. (UMI No. 1033339330)

Jones, J. C. (2013). Relationship between placement type, time in placement and number of placements and juvenile delinquency: An exploration of African-American males in foster care. *Dissertation Abstracts International Section A*, *73*.

Kaufman, G. (2014). Polypharmacy, medicines optimization and concordance. *Nurse Prescribing*, *12*(4).

Kawakami, A., Tanaka, M., Nishigaki, M., Yoshimura, N., Suzuki, R., Maeda, S., & Yamamoto-Mitani, N. (2014). A screening instrument to identify ulcerative colitis patients with the high possibility of current nonadherence to aminosalicylate medication based on the health belief model: A cross-sectional study. *BMC Gastroenterology*, *14*, 220. doi:10.1186/s12876-014-0220-z

Klein, B., Damiani-Taraba, G., Koster, A., Campbell, J., & Scholz, C. (2015). Diagnosing attention-deficit hyperactivity disorder (ADHD) in children involved with child protection services: Are current diagnostic guidelines acceptable for vulnerable populations?. *Child: Care, Health And Development*, *41*(2), 178-185. doi:10.1111/cch.12168

Koh, E., Rolock, N., Cross, T. P., & Eblen-Manning, J. (2014). What explains instability in foster care? Comparison of a matched sample of children with stable and unstable placements. *Children and Youth Services Review*, *37*, 36-45.

Kooshyar, H., Shoorvazi, M., Dalir, Z., & Hosseini, M. (2014). Health literacy and its relationship with medical adherence and health-related quality of life in diabetic community-residing elderly. *Journal of Mazandaran University of Medical Sciences*, *23*, 134-143.

Lasch, K., Marquis, P., Vigneux, M., Abetz, L., Arnould, B., Bayliss, M., & Rosa, K. (2010). PRO development: Rigorous qualitative research as the crucial foundation. *Quality of Life Research*, *19*(8), 1087-1096.

Leathers, S. J., Spielfogel, J. E., Gleeson, J. P., & Rolock, N. (2012). Behavior problems, foster home integration, and evidence-based behavioral interventions: What predicts adoption of foster children? *Children And Youth Services Review, 34,* 891-899. doi:10.1016/j.childyouth.2012.01.017

Leonard, H. (2012). Polypharmacy in treating severe childhood aggression. *Brown University Child & Adolescent Psychopharmacology Update, 14*(1), 1-4

Linares, L., Martinez-Martin, N., & Castellanos, F. (2013). Stimulant and atypical antipsychotic medications for children placed in foster homes. *Plus One, 8*(1), e54152. doi:10.1371/journal.pone.0054152

Logan, S. L., Carpenter, L., Leslie, R. S., Hunt, K. S., Garrett-Mayer, E., Charles, J., & Nicholas, J. S. (2014). Rates and predictors of adherence to psychotropic medications in children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, *44*(11), 2931-2948.

Longhofer, J., Floersch, J., & Okpych, N. (2011). Foster youth and psychotropic treatment: Where next? *Children and Youth Services Review*, *33*(2), 395-404.

Lord, S. M. (2014). Additional federal guidance could help states better plan for oversight of psychotropic medications administered by managed-care organizations. *GAO Reports,* 1-48.

Lynch, F. L., Dickerson, J. F., Saldana, L., & Fisher, P. A. (2014). Incremental net benefit of early intervention for preschool-aged children with emotional and behavioral problems in foster care. *Children and Youth Services Review*, *36,* 213-219.

MacDonell, K., Naar-King, S., Huszti, H., & Belzer, M. (2013). Barriers to medication adherence in behaviorally and perinatally infected youth living with HIV. *Aids And Behavior*, *17*(1), 86-93

Mackie, T. I., Hyde, J., Rodday, A. M., Dawson, E., Lakshmikanthan, R., Bellonci, C., & Leslie, L. K. (2011). Psychotropic medication oversight for youth in foster care: A national perspective on state child welfare policy and practice guidelines. *Children and Youth Services Review*, *33*(11), 2213-2220. doi:10.1016/j.childyouth.2011.07.003

Madden, E., Maher, E., McRoy, R., Ward, K., Peveto, L., & Stanley, A. (2012). Family reunification of youth in foster care with complex mental health needs: Barriers and recommendations. *Child & Adolescent Social Work Journal*, *29*(3), 221-240. doi:10.1007/s10560-012-0257-1

Malee, K., Williams, P., Montepiedra, G., McCabe, M., Nichols, S., Sirois, P. A., & Kammerer, B. (2011). Medication adherence in children and adolescents with HIV Infection: Associations with behavioral impairments. *AIDS Patient Care & Stds*, *25*(3), 191-200. doi:10.1089/apc.2010.0181

McCormick King, M. L., Mee, L. L., Gutiérrez-Colina, A. M., Eaton, C. K., Lee, J. L., & Blount, R. L. (2014). Emotional functioning, barriers, and medication adherence in pediatric transplant recipients. *Journal of Pediatric Psychology*, *39*(3), 283-293.

McGrady, E., Brown, G., & Pai, A. (2015) Medication adherence decision-making among adolescents and young adults with cancer. *European Journal of Oncology Nursing*. 20, 207-214.

McGuire, K., Fung, L. K., Hagopian, L., Vasa, R. A., Mahajan, R., Bernal, P., & Veenstra-VanderWeele, J. (2016). Irritability and problem behavior in autism spectrum disorder: a practice pathway for pediatric primary care. *Pediatrics*, *137*(Supplement 2), S136-S148.

McManus, E. (2012). *Implications of multiple foster care placements on children's self-esteem*. Alliant International University.

McQuaid, E. L., Everhart, R. S., Seifer, R., Kopel, S. J., Mitchell, D. K., Klein, R. B., Canino, G. (2012). Medication adherence among latino and non-latino white children with asthma. *Pediatrics*, *129*(6), e1404–e1410.

Mendys, P., Zullig, L. L., Burkholder, R., Granger, B. B., & Bosworth, H. B. (2014). Medication adherence: process for implementation. *Patient Preference and Adherence*, *8*, 1025–1034.

Mersky, J. P., Topitzes, J., Janczewski, C. E., & McNeil, C. B. (2015). Enhancing foster parent training with parent-child interaction therapy: Evidence from a randomized field experiment. *Journal of the Society for Social Work and Research*, *6*(4), 591-616.

Mirsadraee, R., Gharagozlou, M., Movahedi, M., Behniafard, N., & Nasiri, R. (2012). Evaluation of factors contributed in nonadherence to medication therapy in

children asthma. *Iranian Journal of Allergy, Asthma, And Immunology*, *11*(1), 23-27. doi:10.11.01/ijaai.2327

Modi, A. C., Rausch, J. R., & Glauser, T. A. (2011). Patterns of nonadherence to antiepileptic drug therapy in children with newly diagnosed epilepsy. *JAMA*, *305*(16), 1669-1676.

Montanaro, E. A., & Bryan, A. D. (2014). Comparing theory-based condom interventions: Health belief model versus theory of planned behavior. *Health Psychology*, *33*(10), 1251-1260. doi:10.1037/a0033969

Mosuro, S., Malcolm, D., & Guishard-Pine, J. (2014). Mental health awareness and coping in foster carers: The impact of a counselling skills intervention. *Educational & Child Psychology*, *31*(3), 64-70.

Murray, L., Tarren-Sweeney, M., & France, K. (2011). Foster carer perceptions of support and training in the context of high burden of care. *Child & Family Social Work, 16*(2), 149-158. doi:10.1111/j.1365-2206.2010.00722.x

Nagae, M., Nakane, H., Honda, S., Ozawa, H., & Hanada, H. (2015). Factors affecting medication adherence in children receiving outpatient pharmacotherapy and parental adherence. *Journal of Child & Adolescent Psychiatric Nursing*, *28*(2), 109-117 9p. doi:10.1111/jcap.12113

Narendorf, S. C., Bertram, J., & McMillen, J. C. (2011). Diagnosis and medication overload? A nurse review of the psychiatric histories of older youth in treatment foster care. *Child Welfare*, *90*(3), 27-43

Nash, J. J., & Flynn, R. J. (2016). Foster and adoptive parent training: A process and Outcome investigation of the preservice PRIDE program. *Children and Youth Services Review, 67*, 142-151.

National Institute on Drug Abuse. (2014). Stimulant ADHD medications: Methylphenidate and amphetamines. *Department of Health and Human Services*.

Norton, A. A. (2012). The captive mind: antipsychotics as chemical restraint in juvenile detention. *The Journal of Contemporary Health Law and Policy*, (1). 152.

NVivo11 QSR International. (2015). NVivo11: Getting started. Retrieved from http://download.qsrinternational.com/Document/NVivo11/NVivo11-Getting Started-Guide.pdf

Olfson, M., Blanco, C., Wang, S., Laje, G., & Correll, C. U. (2014). National trends in the mental health care of children, adolescents, and adults by office-based physicians. *JAMA Psychiatry*, *71*(1), 81-90.

Pappadopulos, E., Rosato, N. S., Correll, C. U., Findling, R. L., Lucas, J., Crystal, S., & Jensen, P. S. (2011). Experts' recommendations for treating maladaptive aggression in youth. *Journal of Child and Adolescent Psychopharmacology*, *21*(6), 505–515.

Pataki, C., Thompson, C., Crecelius, G., Tesoro, J., Polsky, G., & Kambam, P. (2016). How does psychotropic medication consent work for youth in foster care. *European Psychiatry, 33*S440. doi:10.1016/j.eurpsy.2016.01.1272

Patel Shrimali, B., Hasenbush, A., Davis, A., Tager, I., & Magzamen, S. (2011). Medication use patterns among urban youth participating in school-based asthma education. *Journal of Urban Health, 88*, 73-84.

Perrin, J. M., Anderson, L. E., & Van Cleave, J. (2014). The rise in chronic conditions among infants, children, and youth can be met with continued health system innovations. *Health Affairs, 33*(12), 2099-2105.

Petty, N. J., Thomson, O. P., & Stew, G. (2012). Ready for a paradigm shift? Part 2: Introducing qualitative research methodologies and methods. *Manual Therapy*, *17*(5), 378-384.

Pezalla, A. E., Pettigrew, J., & Miller-Day, M. (2012). Researching the researcher-as-instrument: An exercise in interviewer self-reflexivity. *Qualitative Research*, *12*(2), 165-185.

Ranney, M. L., Meisel, Z. F., Choo, E. K., Garro, A. C., Sasson, C., & Morrow Guthrie, K. (2015). Interview-based qualitative research in emergency care part II: Data collection, analysis and results reporting. *Academic Emergency Medicine*, *22*(9), 1103-1112.

Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (Eds.). (2013). *Qualitative research practice: A guide for social science students and researchers*. Sage.

Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (1988). Social learning theory and the health belief model. *Health Education & Behavior, 15*, 175–183.

Rubin, D., Matone, M., Huang, Y. S., Feudtner, C., & Localio, R. (2012). Interstate variation in trends of psychotropic medication use among Medicaid-enrolled children in foster care. *Children and Youth Services Review, 34*(8), 1492-1499.

Ryan, G. W., & Russell Bernard, H. (2003). Techniques to identify themes. Field Methods, 15(1), 85–109.

Sabaté, E. (2003). *Adherence to long-term therapies: Evidence for action*. World Health Organization. Retrieved from http://www.who.int/chp/knowledge/publications/adherence_report/en/

Sajadi Hazaveh, M., & Shamsi, M. (2011). Assessment of mothers behavior in preventing febrile convulsion in their children in Arak City: An application of health belief model. *Journal of Jahrom University of Medical Sciences, 9*(2), 34-40.

Sakai, C., Lin, H., & Flores, G. (2011). Health outcomes and family services in kinship care: Analysis of a national sample of children in the child welfare system. *Archives of Pediatrics & Adolescent Medicine, 165*(2), 159-165

Salvo, M. C., & Cannon-Breland, M. L. (2015). Motivational interviewing for medication adherence. *Journal of the American Pharmacists Association, 55*(4), e354-e363.

Schneiderman, J. U., Smith, C., & Palinkas, L. A. (2012). The caregiver as gatekeeper for accessing health care for children in foster care: A qualitative study of kinship and unrelated caregivers. *Children and Youth Services Review, 34*(10), 2123-2130.

Schubart, J. R., Camacho, F., & Leslie, D. (2014). Psychotropic medication trends among children and adolescents with autism spectrum disorder in the Medicaid program. *Autism, 18*(6), 631-637.

Scozzaro, C., & Janikowski, T. (2015). Mental health diagnosis, medication, treatment and placement milieu of children in foster care. *Journal of Child & Family Studies, 24*(9), 2560-2567. doi:10.1007/s10826-014-0058-6

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, *22*(2), 63-75.

Simmel, C., Morton, C., & Cucinotta, G. (2012). Understanding extended involvement with the child welfare system. *Children & Youth Services Review, 34*(9), 1974-1981. doi:10.1016/j.childyouth.2012.06.007

Solchany, J. (2012). Psychotropic medication and children in foster care: Tips for advocates Judges. *Child Law Practice, 31*(2), 1-27.

Soria-Saucedo, R., Walter, H. J., Cabral, H., England, M. J., & Kazis, L. E. (2016). Receipt of evidence based pharmacotherapy and psychotherapy among children and adolescents with new diagnoses of depression. *Psychiatric Services*, *67*(3), 316-323.

Southammakosane, C., & Schmitz, K. (2015). Pediatric psychopharmacology for treatment of ADHD, depression, and anxiety. *Pediatrics*, *136*(2), 351-359.

Stein, M. A., Waldman, I. D., Charney, E., Aryal, S., Sable, C., Gruber, R., & Newcorn, J. H. (2011). Dose effects and comparative effectiveness of extended release dexmethylphenidate and mixed amphetamine salts. *Journal of Child and Adolescent Psychopharmacology, 21*(6), 581-8.

Spencer, D., Marshall, J., Post, B., Kulakodlu, M., Newschaffer, C., Dennen, T., & Jain, A. (2013). Psychotropic medication use and polypharmacy in children with autism spectrum disorders. *Pediatrics, 132*(5), 833-840.

Stott, T. (2012). Placement instability and risky behaviors of youth aging out of foster care. *Child and Adolescent Social Work Journal*, *29*(1), 61-83.

Stretcher, V. J., & Rosenstock, I. M. (1997). The health belief model. *Cambridge handbook of psychology, health and medicine,* 113-117. Retrieved from http://www.acf.hhs.gov/sites/default/files/cb/afcarsreport23.pdf

Szilagyi, M. A., Rosen, D. S., Rubin, D., & Zlotnik, S. (2015). Health care issues for children and adolescents in foster care and kinship care. *Pediatrics, 136*(4), e1142-e1166.

Thomas, E., & Magilvy, J. K. (2011). Qualitative rigor or research validity in qualitative research. *Journal for Specialists in Pediatric Nursing*, *16*(2), 151-155.

Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative Social Work, 11*(1), 80-96.

United States Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2017). *Child* M*altreatment 2015*. Retrieved from http://www.acf.hhs.gov/programs/cb/research-data-technology/statistics-research/child-maltreatment.

U.S. Department of Health and Human Services, Childrens' Bureau. Child Welfare Information Gateway. (2016a). *Definitions of child abuse and neglect.* Retrieved

from https://www.childwelfare.gov/topics/systemwide/laws-policies/statutes/define/

U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2016b). *Child maltreatment 2014*. Retrieved from http://www.acf.hhs.gov/programs/cb/research-data-technology/statistics-research/child-maltreatment

U.S. Department of Health and Human Services, Administration for children and families, administration on children, Youth and families, Children's Bureau. (2016c). *The AFCARS Report.* Retrieved from https://www.acf.hhs.gov/sites/default/files/cb/afcarsreport22.pdf

U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2016d). *Trends in foster care and adoptions: FY 2006-2015.* Retrieved from http://www.acf.hhs.gov/programs/cb

Vasbinder, E. C., Belitser, S. V., Souverein, P. C., van Dijk, L., Vulto, A. G., & van den Bemt, P. A. (2016). Nonadherence to inhaled corticosteroids and the risk of asthma exacerbations in children. *Patient Preference & Adherence, 10,* 531-538. doi:10.2147/PPA.S92824

Wahyuni, D. (2012). The research design maze: *Understanding paradigms, cases, methods and methodologies.*

Warner, L., Song, N., & Pottick, K. (2014). Outpatient psychotropic medication use in the US: A comparison based on foster care status. *Journal of Child & Family Studies*, *23*(4), x652-665. doi:10.1007/s10826-013-9885-0

Weinstein, N. D. (1993). Testing four competing theories of health-protective behavior. *Health Psychology*, *12*(4), 324.

Wertz, F. J. (2005). Phenomenological research methods for counseling psychology. *Journal of Counseling Psychology*, *52*(2), 167-177. doi:10.1037/0022-0167.52.2.167

Willig, C. (2013). *Introducing qualitative research in psychology*. McGraw-hill education (Berkshire, England).

Woods, S. B., Farineau, H. M., & McWey, L. M. (2013). Physical health, mental health, and behaviour problems among early adolescents in foster care. *Child: Care, Health & Development*, *39*(2), 220-227. doi:10.1111/j.1365-2214.2011.01357.x

Woods, M., Paulus, T., Atkins, D. P., & Macklin, R. (2016). Advancing qualitative Research using qualitative data analysis software (QDAS)? Reviewing potential versus practice in published studies using ATLAS. ti and NVivo, 1994–2013. *Social Science Computer Review*, *34*(5), 597-617.

Yue, Z., Li, C., Weilin, Q., & Bin, W. (2015). Application of the health belief model to Improve the understanding of antihypertensive medication adherence among Chinese patients. *Patient Education and Counseling*, *98*(5), 669-673.

Appendix A: Qualifying & Demographic Interview Questions

Participant ID_____ Date of Interview _____

Gender _____Race _____Age____ Marital Status ___ Consent Agreed _____

1. What is the age and sex of your foster child?
2. In what county does the foster child reside while in your care?
3. How long have you cared for this child?
4. Was this child transferred from a previous foster home?
5. How many placements has your child experienced prior to being placed in your care?
6. What is your foster child's diagnosis and medication(s) prescribed for this health concern?
7. What is the medication regimen or how often does the child take the medication(s)?
8. Is the medication(s) in pill form or liquid?
9. Does the pill need be cut?
10. How was the information about the child's diagnosis, behaviors, and previous placement obtained? (These questions are important to the foster parent who must relay the information to the new doctor).

Appendix B: Interview Questions

Participant ID _____ Date of Interview _____

Perceived Susceptibility

General Question:

1. Tell me about your experience of taking over your child's medication when the child first came to your home.
2. What did you know about the medication(s) your child was prescribed when you first received the medication(s)?
3. What do you know about the medication(s) now?
4. Tell me about your child's experience when he/she first started taking the medication(s).
5. Has your child ever had any issues with the medication(s)? Tell me about it.

Follow-up Questions:

1. What do you believe will happen to the child's health if the child does not receive his/her medication?
    a. Do you believe that the health condition(s) your child is experiencing can be treated without medication(s) or through other treatments? If yes, please explain.
2. Is the medication(s) age appropriate for your child?

3. Is the child able to follow the regimen or the scheduled times to take the medication? Please explain.
4. What are your beliefs about a child taking multiple medications?
5. What are your beliefs about the effect of the medication(s) on the child's behavior if the medication(s) is missed?
    a. How do you know if the medication(s) changed the health condition or behavior of the child?
    b. Has the change been a positive or a negative change? Explain.
6. Should the medication be stopped if the child does not wish to continue taking the medication(s)?
    a. What are your beliefs about giving a child medication(s) when the child doesn't like the medication(s) or has negative feelings about the medication(s)?
    c. Do you believe that you can decrease or stop the medication(s) if the child has benefited from the medication(s) after a period of time?
    d. What are your beliefs about decreasing or stopping the medication(s)?
    e. How important are follow-up visits for this child's diagnosis and prescriptions? Explain.

a. Describe a time when you told the doctor how the child reacted negatively and/or positively to the medication(s).

Perceived Severity

General Question:

1. Describe your child's diagnosis.
2. Is the diagnosis serious? Please explain.
3. Describe your child's symptoms when he/she first came into your care and his/her health symptoms now.

Follow-up Questions:

1. Have you read about or were told about the side effects of your child's medication(s)?
    a. How do you gather information about the side effects of the medication(s)?
    b. Are the side effects of the medication(s) are serious? Please explain.
2. What does the child express to you about taking the medication(s) and/or any side effects experienced?
3. Describe a time when you told the doctor about the side effects the child experienced and the outcome of that conversation.

Perceived Benefits

General Question:

1. Tell me about your child's overall treatment plan.

a. How long does your child's doctor state that he/she will continue to take this medication?

b. How often do you take the child in for doctor visits?

c. Do you agree with the treatment plan? Explain.

Follow-up Questions:

2. What are the benefits of the medication(s) your child is prescribed?

    a. Do the medication(s) regimens need to be followed as the doctor prescribed? Explain.

    b. How do you know when the child is benefiting from the medication(s)?

    c. Have your family members or others noticed a change in the child's behavior or health condition?

    d. Describe any positive or negative statements others have made about the child's behaviors or health conditions.

3. Is it beneficial to continue with follow-up visits with the child's doctor?

Perceived Barriers

General Question:

1. When you first received the child, did you experience any situations that interfered with overall treatment plan? Please explain.
2. Have you experienced any situations that in the past or present interfered with following the child's treatment plan? Please explain.

Follow-up Questions:

1. When you first received the child into your care, did you experience any difficulty gaining access to the child's medication? Explain.
2. When you first received the child into your care, did you understand how to administer the medication(s)?
3. When you first received the child into your care, did you experience any difficulty getting the child to take the medication(s)? Explain.
4. Has your overall ability to understand the medications benefits and side effects increased over time?
5. Have you experienced any interference in adhering to the follow-up visits?
6. What are your beliefs about caring for a child with mild to chronic health conditions?
7. Does your opinion matter in the prescribing process?
    a. Should your opinion override what the prescriber is advising?
8. Has there ever been a time when the medication(s) regimen was difficult to manage? Please explain.
9. Is there any cost associated with the medication(s)?
    a. Have those cost created problems in obtaining or administering the medication(s)?

10. How is your everyday life impacted by caring for a child who takes medication(s)?

11. What are some situations that might or have interfered with administering medication(s)?

12. What are some situations that might or have interfered with the doctor's recommendation for this child's health concern(s)?

Cues to Action

General Questions:

1. Describe what you do to manage your child's treatment plan.

2. How do you respond to changes in symptoms of your child's health condition?

Follow-up Questions:

1. How do you remember to administer medications?

2. How do you know when your child is experiencing the side effects of the medication(s)?

    a. Do you report positive or adverse reactions to medication(s) your child is taking? Explain.

    b. How do you remember to advise the prescriber of positive or adverse reactions to the medication(s)?

3. How do you remember follow-up visits with your child's doctor?

4. Do you report other information regarding the medication(s) to the doctor? Explain.

Self-Efficacy

General Question:

1. Do you understand the components of the treatment plan? Explain.

Follow-up Questions:

1. What is your understanding of medication adherence? Explain.
2. Describe your ability to continue to adhere to the medication(s) regimen?
3. Describe the training you have received regarding the child's health diagnosis?
4. Are you receiving adequate help from the social worker regarding this child's medication(s) and follow-up visits? Please explain.
5. When you first received the child, did you receive information from the previous foster parent or biological parents to help you understand the child's health condition, medication(s), and behaviors? Please explain.
6. When you first received the child into your care, were you able to provide information to the doctor about the past history of the child's behaviors, symptoms, or health condition? Please Explain.
7. What are issues that concern you regarding the adherence to the child's medication(s)?