

THE CHILD AS A WHOLE: A PROPOSED MODEL FOR ADDRESSING MENTAL AND BEHAVIORAL CONDITIONS OF FOSTER CARE YOUTH

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Abstract

Most children who are removed from their biological homes because of abuse or neglect are placed in foster care. The trauma of being separated from the only family they know, and the potentially frequent movements to different foster homes, puts these children at risk for psychological disorders. Physicians are prescribing psychotropic drugs at an alarming rate despite the existence of other alternatives with less harmful effects. Foster parents and other advocates acknowledge that the side effects of these medications, which can include weight gain, diabetes, obesity, hallucinations, and others, may harm these patients in the long run. In this study, I conduct a literature review on the issue of high psychotropic utilization by foster children using research articles, organizational briefs, and government documents from the 1990s to the 2020s. Building on a study by Fisher et al. (2009), I propose a new approach to providing treatment options and holistic health care to foster youth with mental and behavioral health concerns. The proposed model encompasses the use of various points of intervention that may be used simultaneously and includes Mode 1, Trauma-Informed Screening, Mode 2, Assessing and Encouraging Opportunities for Stability and Normalcy, and Mode 3, Recommending Specialized Treatments. The intended use of this model is to serve as a physician guide during patient consultations to resolve issues in unbalanced and/or uninformed decision-making. To ensure that this approach is effective at improving foster population health, policymakers and leaders in medicine should consider embedding integrated foster health services within clinical settings, thus granting foster families access to the resources outlined in the model.

Key terms: foster care, mental and behavioral health, pediatrics, psychotropics, non-pharmacological treatments

Introduction

By the 1900s, foster care systems were established in the United States to protect children from unsafe home environments (CASA of Travis County, 2021). According to Court Appointed Special Advocates (CASA) of Travis County (2021), while foster care systems obligated states to take responsibility for child welfare, it was not until the Adoption Assistance and Child Welfare Act of 1980 when federal funding and support was solidified. Regardless of these positive intentions, many children who have been removed from their biological family home and put into the foster care system have undergone traumatic experiences and, in turn, face lifelong physical and mental health challenges. Foster children have been reported to experience events such as physical abuse, sexual abuse, emotional abuse, bullying, and neglect (Greeno et al., 2008). As specified by Salazar et al. (2013), about 80% of children in foster care in 2002 were reported to have experienced at least one traumatic event, with the most common categories involving exposure to indirect trauma (e.g., witnessing domestic abuse between parents) and interpersonal violence, in which an adult-figure uses a power imbalance to control a child. This percentage is about double the rate of trauma experienced by the general youth population. Because childhood and adolescent years are important phases of one's life, the foster system, and its unstable living arrangements, can make children even more vulnerable as they age (Greeno et al., 2008). Furthermore, Greeno et al. (2008) affirm that prolonged exposure to traumatic events can adversely affect the health of youth even as they exit foster care and become independent adults.

Children in foster care are more likely than other youth to develop chronic conditions into adulthood, which may be linked to their history of trauma before, during, and even after placement. Once a child has experienced one or more traumatic experiences, neural pathways

that are still rapidly developing are altered as a physiological response to stressors (Deutsch & Fortin, 2015). Traumatic stressors are identified by the Complex Trauma Task Force (2003) as compromising a child's development and placing them at high risk for psychological conditions such as learning impairments and cognitive and behavioral disorders. The effects of trauma can be further compounded through disruptions in family life as foster youth are placed into different homes, positioning them in situations that involve separations and frequent adaptations to new environments (Bartlett & Rushovich, 2018). As a result, foster care itself may be traumatizing for a child and can contribute to their health risks.

Psychotropic medication is a common treatment for children exhibiting psychological and behavioral conditions that may be related to trauma. As reported by The Health and Human Services Commission (2011), about a quarter of Texan foster care children, ages 0 to 17 years, were prescribed at least one psychotropic. Psychotropics include drugs like antipsychotics, which have been shown to aid children suffering from mental health disorders such as bipolar disorder, schizophrenia, conduct disorders, and other ailments by improving negative symptoms such as social withdrawal, apathy, and aggression (Zuddas et al., 2011). In contrast, psychotropics have also been shown to have harmful side effects such as weight gain, hyperglycemia, hyperlipidemia, and may even cause involuntary movement of the body (McLaren et al., 2017).

Despite psychotropics' medical advantage in controlling behavior, concerns have risen regarding foster children's high utilization of such drugs compared to other children receiving Medicaid (an insurance plan foster youth also receive) who are not in foster care (Kessler et al., 2008). Deutsch and Fortin (2015) argue that physicians may hold a lower diagnosis threshold for foster children because they immediately acknowledge the child's obstacles. Thus, this clinical mindset may explain physicians' willingness to prescribe psychotropics as soon as a child

expresses symptoms. While these medications can be beneficial, their physical and mental health side effects often make it difficult to determine whether the positive aspects outweigh the negatives, especially when they are prescribed to children.

Acknowledging the limited systematic implementation of non-pharmacological interventions, or treatments that do not involve medications, Fisher et al. (2009) created a four-option model for treating children in foster care with psychological conditions. The researchers, all of whom have made significant contributions to foster care research by developing behavioral interventions, describe these treatment options as ranging from low- to high-intensity care: screen and refer (option 1), enhanced foster care/addition of supplemental activities (option 2), targeted foster-care interventions to address specific needs/issues (option 3), and Multidimensional Treatment Foster Care (option 4). According to them, the first option should be applied to a foster youth who does not exhibit any problems in the present, while the other treatments should be applied if their condition worsens. Though this model represents advancements in foster care treatment models, the researchers dismiss the potential efficacy of pharmacological treatments, or medications, alongside these non-pharmacological interventions, leaving gaps in their model.

Foster children's psychological health should be addressed holistically through a model of various treatment options, including a place for psychotropics, depending on the individual and the severity of their condition. To account for the various aspects of this issue, the following sections establish background on foster children's mental health and behavioral needs, outline the current treatments available, and propose a new holistic model based on previous research. While this thesis describes and promotes the use of non-pharmacological methods to heal a child, the importance of psychotropic medications is also highlighted. Moreover, this proposed model

is framed as an informative guide for practice so that physicians are able to make well-informed decisions, alongside foster youths, foster parents, and social workers, regarding foster youths' health care.

Background

To better understand foster children and the issue of high psychotropic utilization, this section first explores the legal processes that lead to foster care, the health needs of foster children, and placement instability, which is described as the unstable living of a child who has moved to different foster homes (Casey Family Programs, 2018).

The Child Welfare System to Foster Care

As per the Children's Bureau (2020), the child welfare system was established to ensure the safety of children. The Children's Bureau operates under the Department of Health and Human Services' Administration for Children, focusing on "preventing child abuse and neglect by strengthening families, protecting children from further maltreatment, reuniting children safely with their families, and finding permanent families for children who cannot safely return home" (Children's Bureau, 2020, p. 2). Since each state has a different policy on neglect and abuse, the following sections provide a general overview of the process, from a child's removal from their biological home to their placement in a foster home, as detailed by the Children's Bureau (2020).

Legal Processes

The Children's Bureau (2020) states that the procedure begins with caseworkers addressing a report made by a mandatory reporter or an individual that is obligated by state law (i.e., teachers and medical professionals) to report any signs of abuse. To respond to a report,

Child Protective Services (CPS) caseworkers will interview the parents of the child and various authority figures in the child's life, such as doctors, teachers, and other providers. Once the interviews have been conducted, these caseworkers may conclude the case as either unsubstantiated, or that no evidence was found, or substantiated, or that there was enough evidence found to meet the legal definition of abuse. If the findings are that there is little or no risk, the case may close and be considered a one-time occurrence. If there is low to moderate risk, the caseworker may refer the family to in-home child welfare services which will be used to strengthen the family and the safety of the child (Children's Bureau, 2020).

According to the Children's Bureau (2020), a case may be labeled as high-risk if the caseworker gathers enough evidence of abuse and neglect within the family home, deeming the parents to be immediate dangers. The child will either be moved to a foster home, a relative's home, or a group residential setting. Even after the child's removal from their home, their biological parents may visit the child if the state finds it appropriate to do so. As foster care is intended to be a temporary living arrangement, the ultimate goal of the foster care system is permanent placement, or placing a child into a safe, permanent home with an adult(s) who is recognized as their legal guardian (Annie E. Casey Foundation, 2012). Caseworkers are required to create permanency plans for a child starting from the permanency hearing held in court and twelve months afterward (Children's Bureau, 2020). During these hearings, a permanency plan is discussed for the child, which almost always aims to reunite the child with their biological parents (Children's Bureau, 2020). On the other hand, Ampersand Families (n.d.) report that not all children reunify with their parents due to parental lack of cooperation in creating a healthy home, parental lack of resources, and/or parental incarceration and relapses. This results in a transfer of custody to the next legal guardian, such as a foster parent. Children that remain in the

foster care system and do not achieve permanency eventually age out of the system by the time they are eighteen and are of legal status (Children's Bureau, 2022).

Once a foster child ages out, the Children's Bureau (2022) states that CPS is no longer responsible for the individual, but at least thirty-three states allow for them to extend their living within foster care until they are 21 years old. While extended foster care is not guaranteed to be approved by CPS, extended foster care may be a favorable option for those who are not ready to live independently and may need additional assistance prior to the actual transition (Children's Bureau, 2022). Furthermore, an individual must be enrolled in a high school, college, employment program, or be part-time employed to qualify for extended foster care (Children's Bureau, 2022).

Foster Parents

The foster child's caregiver, or foster parent, is responsible for creating a safe home for the youth. They play a crucial role in monitoring the youth and keeping track of medical and dental appointments and other living arrangements necessary for them. Because they are temporarily taking place of an individual's biological or future adoptive parents, they must pass criminal/protective services background checks, provide 24-hour care and supervision, care for the foster child emotionally and financially, and be flexible in accommodating the child as a parent (National Foster Parent Association, 2020) Furthermore, the National Foster Parent Association (2020) states that the foster parent must be willing to serve as a member of the foster youth's support team, which includes caseworkers and the youth's primary care physician (PCP).

To become licensed as a foster parent, several steps must be taken, beginning with meeting private or public foster care agencies (depending on candidate's preference) and undergoing assessments by those agencies to determine whether the candidate meets the

requirements (National Foster Parent Association 2020). A family assessment would follow, during which the agency would gather information about the candidate and their family. Afterward, a licensing worker will issue a background check and conduct home safety inspections. Before licensure, the candidate must attend a mandatory orientation as well as a minimum of 10 to 30 hours of training (depending on the state), which may include specialty training such as CPR, first aid, and caring for children with special needs. Once a licensing worker has completed a full report and the candidate has been granted licensure, a child can be placed with the foster parent (National Foster Parent Association, 2020).

As recommended by the American Academy of Pediatrics (2015), foster parents should have their foster child screened by a pediatrician within 72 hours of placement. Depending on the state, foster parents must follow an additional set of requirements once a child has been placed in their care. For example, foster parents in Texas have 30 days to bring the child to a Primary Care Provider (PCP) for a child well-check, which is a health assessment. Moreover, a dental examination and cleaning (within 30 days of the child entering foster care) as well as a Child and Adolescent Needs and Strengths (CANS) assessment (within 60 days) are also required (American Academy of Pediatrics, 2015). In Oregon, foster parents are not only responsible for taking the child to the previously listed assessments, but also to a Mental Health Assessment (if 3 years or older) or an Early Intervention Screening (if under 3 years old) within 60 days of placement (Oregon Department of Human Services, 2017).

While each foster parent is informed of the responsibilities they are expected to fulfill, these obligations can weigh heavily on the parent, especially if they are fostering several children. According to Foster Texas (2021), although each state provides a stipend (which amount varies depending on the service level and type of care) to foster parents per foster child,

these funds are mostly used to feed and dress the child. This stipend may only cover a portion of the costs associated with raising a child, but it may sometimes cover the cost of transportation, such as travel to the pediatrician (Foster Texas, 2021). However, as per The Family Initiative (2018), “many foster parents estimate that the amount received from the state is less than half the amount actually needed to care for foster children.” It is important to consider these factors when exploring treatment options, as no service can be effectively provided to the child if the foster parent does not have the resources (whether because of remote residential location, work-related reasons, or financial capabilities) to take the child to specialized treatment.

Health Needs of Foster Children

The purpose of this section is to describe the screening methods used by physicians in the evaluation of foster youth, as well as the common diagnoses that are encountered in this population. In addition, placement instability, which occurs when a foster youth moves from one foster home to another, is discussed in relation to health care continuity.

Brief Review of Screening and Assessing

Given the likelihood of behavioral issues due to trauma, screening of foster youth in foster care should be done from a trauma-informed perspective. The trauma they have likely experienced can manifest as physical, mental, and behavioral health concerns. The Child and Family Services Improvement Innovation Act of 2011 implemented requirements for states to screen foster children for the trauma that may be connected to the child’s removal from their original home and/or any maltreatment they have suffered. Children in the welfare system are commonly insured under Medicaid, a government-funded health insurance plan with benefits that vary by state. Because foster youth are under this plan, they are entitled to Medicaid’s Early

and Periodic Screening, Diagnostic and Treatment (EPSDT) benefits, allowing for more comprehensive care that targets prevention and other services (Conradi et al., 2014).

As specified by Conradi et al. (2014), screening is a precursor to clinical assessment, in which a child is referred to if there are signs of trauma symptoms discovered during screening. To screen for trauma and mental health, the pediatrician, social workers, and other supervisors explore whether the child has gone through a traumatic event in the past or expressed any mental health or behavioral issue that may need special services. Functional assessments, which involve collecting information on a child's social, emotional, behavioral, cognitive, and physical development, are conducted by caregivers and other professionals involved in the child's life. Assessing at this stage can determine if there are developmental delays or similar issues that should be addressed immediately. Because screening is performed by pediatricians during annual checkups, this process is crucial in tracking a child's health status, especially if the child needs to be referred to a psychiatrist due to mental or behavioral health concerns.

Conradi et al. (2014) further state that once a child is screened and found to have a need related to trauma, which usually takes two or three consultations to discover, a clinical interview by a physician is conducted. Family history and any history of trauma are also explored during these sessions. The next step is to review the child's symptoms as reported by foster parents, such as their current behavior at home and in school, as well as their interactions and the way they have built relationships. Once enough information is gathered through this assessment, a clinician will choose a proper treatment that suits the child's needs. Although these methods are ideal for screening, assessing, and referring foster children, processes beyond routine screening are not always thoroughly explored, perhaps due to symptoms being overlooked during screening (Conradi et al., 2014). Because pediatricians are medically required to perform

developmental and mental health screenings on all children, screening is a fundamental step to determine if a child has symptoms and if they may be due to an underlying condition or illness (Conradi et al., 2014); in essence, screening serves as the gatekeeper for the provision of further services.

When discussing screening and assessment, it is important to note the process of diagnosing, specifically regarding foster children. In their study, Deutsch and Fortin (2015) found that adolescents in foster care had lower diagnostic thresholds than their peers outside of the foster care system. Since foster children have a lower diagnosis threshold, they are more likely to be referred to specialists and use more services than their non-foster care counterparts. Although diagnoses are more frequent among foster children, these children may have also lacked proper medical care before entering the system due to neglect and abuse; thus, insufficient medical care during a youth's life prior to entering foster care may have caused a delayed diagnosis or even be the primary cause of a condition. Therefore, physicians might be compensating for the lack of initial care by acknowledging foster children's traumatic histories and being more perceptive to early signs of concern.

Common Diagnoses

Foster children are at higher risk for chronic conditions (psychological/behavioral, ophthalmologic, educational, etc.), malnutrition, sexually transmitted infections, and future health risks than the general youth population (Deutsch & Fortin, 2015). According to the Center for Mental Health Services and Center for Substance Abuse Treatment (2013), about 49% of foster children, ages 0 to 17 years, are diagnosed with a mental health condition compared to 10.9% of non-foster care children of the same age demographic. The most prevalent of these disorders were disruptive behavior disorders (DBD) and attention-deficit/hyperactivity disorder

(ADHD). While immunizations and infections are the primary concerns of foster children ages 0 to 5 years, there was a high occurrence of DBD among these children as well (Center for Mental Health Services and Center for Substance Abuse Treatment, 2013).

Long-term health implications include the effects of trauma. Roughly 22% of individuals who were formerly in foster care are diagnosed with post-traumatic stress disorder (PTSD), while 4.5% of the general population has the same illness (National Conference of State Legislatures, 2019). An extensive longitudinal study of 21-year-old former foster youth living in the Midwest U.S. found that 11% of them received psychological or emotional counseling, 13% were prescribed medications for these conditions, and 13% had been hospitalized (Courtney et al., 2007). Meanwhile, only 7% of 21-year-olds who participated in this study but had not been in foster care received counseling. The same group of former foster youth was re-interviewed at the age of 26. According to Courtney et al. (2011), 25% of these participants reported using behavioral or mental health services in the past year, which is a 14% increase since the last interview. In addition, psychotropics were the most prescribed medications for this group. Ultimately, research strongly suggests that mental health implications persist even after a person has departed foster care, resulting in increased health needs and specialized services.

Placement Instability and Health Care

Placement instability occurs when a youth frequently relocates into different foster homes. This may be due to the youth's behavioral challenges their current foster parent(s) are unable to manage (Casey Family Programs, 2018). While the end goal of foster care is for the youth to reach permanency in a safe and stable family home, the longer they remain in the system, the more placements they are likely to experience (Casey Family Programs, 2018). As Hall and Jones (2018) explain, “placement disruptions tend to re-traumatize youth,” (p. 587)

affecting their abilities to form and maintain healthy relationships. Deutsch & Fortin (2015) underscore placement instability's role in contributing to a child's behavioral problems and threatening the continuity of a child's healthcare services. This gap in services may arise when a child is placed into a new foster home and medical information such as previous referrals or utilization of services is either lost, not communicated to the new caregiver, or even duplicated after this move (Deutsch & Fortin, 2015). Moreover, these researchers assert that preventive measures usually seen as basic medical care, such as immunizations, may also be impacted by this change. Because foster parents may not have prior knowledge or experience in meeting a newly placed child's needs, the child's already unstable health care may be further compromised. A child who has been deprived of consistent, long-term caregivers due to placement instability will suffer more because of disruptions in family life and health care.

Physicians may be discouraged from becoming more involved in foster children's lives outside of routine visits due to their fear of being involved in lengthy judicial processes, potential administrative burdens, and the lack of appropriate government reimbursement for their services (Deutsch & Fortin, 2015). Factors surrounding placement instability and continuity of medical care play important roles in how foster children receive treatment in our current healthcare system. However, finding solutions to systematic problems is no easy feat. Thus, it is the responsibility of pediatric physicians to continuously aim for high-quality care and recommend appropriate treatments as soon as needs arise. Proper treatment that resolves behavioral problems may also indirectly improve placement stability and, consequently, the lives of foster children (Deutsch & Fortin, 2015).

Current Treatment Types: Psychological Services vs. Behavioral Interventions

While there are many approaches to treating the general population of children in the United States with mental and behavioral conditions, this thesis will examine two categories of services that apply to children in foster care: psychological treatments and behavioral interventions. Psychological treatments target specific symptoms associated with mental health and behavioral disorders. These treatments are interventions utilized in clinical settings, such as psychotropic medications and therapies, including Child-Parent Psychotherapy (CPP), play therapy, Dialectical Behavior Therapy (DBT), and Cognitive-Behavioral Therapy (CBT). Such services may require pediatricians to properly screen the child before referring them to a mental health specialist. On the other hand, behavioral interventions focus on changing child and/or parent behavior and are not medical interventions per se. For the sake of this thesis, behavioral interventions are foster care-specific and include child/parent behavioral programs and Treatment Foster Care (TFC),

Psychotropic Medications

Children with mental health disorders, such as depression, ADHD, anxiety disorders, and mood disorders are frequently prescribed psychotropics, as they can influence the mind, body, and behavior (Kim, 2020). Psychotropics are a large class of drugs and include antipsychotics, anti-anxiety medication, stimulants, and mood stabilizers (Solchany, 2011). Antipsychotics are frequently used to alleviate patients' symptoms of disruptive behavior and other mood disorders, while stimulants may alleviate symptoms of ADHD (Zuddas et al., 2011). Furthermore, Solchany (2011) states that psychotropic medications may help physicians diagnose mental

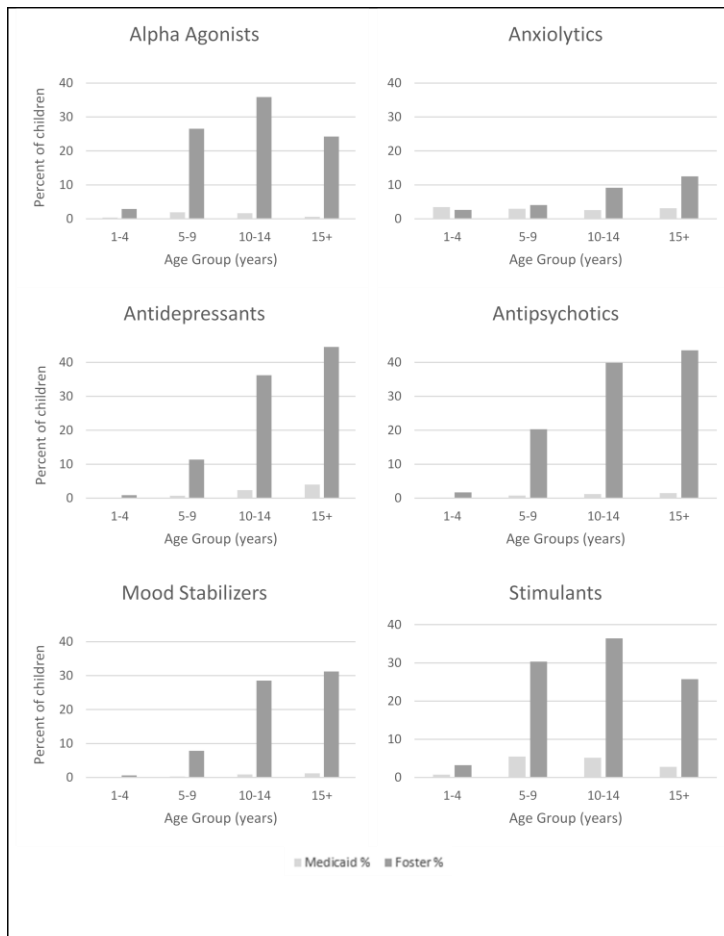
health conditions. When a physician suspects a child has a condition, they may prescribe a specific psychotropic and observe if the child is benefitting from the treatment, indicating that the initial diagnosis was accurate, or if their symptoms have worsened, indicating the need for another diagnosis. Pharmaceuticals hold great potential in benefiting a child by improving their physical and cognitive functions, especially as symptoms become obstacles in their daily lives.

Just as every medication has its advantages, there are also drawbacks to utilizing psychotropics. Researchers like Correll (2008) suggest children on antipsychotics are at a higher risk of adverse effects, such as weight gain and metabolic and hormonal side effects, than adults on the same medication. This can result in poor functioning and possibly diseased states of organs such as the lungs, kidneys, heart, and even the reproductive system. Aside from the most extreme effects, short-term impacts of weight gain can lead to diabetes and obesity, which are high concerns as these physical changes can harm a child's mental health as well (Correll, 2008). These factors can lead to worsening mental and behavioral conditions, leading to self-esteem issues, and potentially damaging a child's quality of life. Because of these adverse effects, McLaren et al. (2017) argue that a child's health factors, such as body glucose, lipid level, body mass index (BMI) and abnormal involuntary movements (AIM), should be monitored while they are prescribed psychotropics. As reported by these same researchers in their national survey of child psychiatrists throughout the United States, most psychiatrists are aware (95%) of the existence of monitoring guidelines for psychotropic drugs and agree (80%) with them. However, only 20% of these psychiatrists have implemented effective monitoring guidelines for children's side effects (McLaren et al., 2017). Given that this is one of the largest studies on psychiatrists' monitoring practices for children prescribed psychotropics, it confirms that significant gaps exist in how these medications are currently monitored.

Research has shown that psychotropics are frequently prescribed to foster children. For example, in Texas, foster children are four times more likely to be prescribed psychotropic medications than children not in foster care who are also covered by Medicaid (Keefe, 2021). Figure 1 shows that foster youth of all ages in Southeast Texas are prescribed psychotropics at a much higher rate (2 to 27 times greater) than their same-age peers who are not in foster care. Clearly, these high utilization rates demonstrate the prevalence of psychological disorders and the frequency with which they are treated with medications.

Figure 1

Percentages of Foster Youth and Non-Foster Youth (on Medicaid) in Southeast Texas Utilizing Psychotropic Medications



Note. These six graphs display, across the six classes of psychotropics, the percentage of foster children vs. Medicaid children who are prescribed psychotropics by age group. From “Psychotropic Medication Usage Among Foster and Non-Foster Youth on Medicaid,” R. Keefe, October 11, 2021, *American Academy of Pediatrics* (<https://www.aap.org/en/news-room/news-releases/aap/2021/children-in-foster-care-much-more-likely-to-be-prescribed-psychotropic-medications-compared-with-non-foster-children-in-medicaid-program/>). Copyright 2023 by American Academy of Pediatrics.

The Opposing Views on Psychotropics for Foster Children

Out of all treatment types, psychotropics have begun to be a highly discussed topic within the field of foster children’s health. Because of its potential for worsening health conditions as well as its important role in healing an individual, there have been mixed feelings about its usage in medicine, specifically for children. Opinions by foster children, social workers, foster parents, external advocates, researchers, and physicians are explored within this section to better grasp controversial usage.

Foster Children. It has been observed that foster youth who have become more aware of their psychotropic prescriptions and the reasons for taking them have developed certain perceptions about these medications. Foltz and Huefner (2014) found that several foster children (45%) from their study reported psychotropic medications as unfavorable. Youth who were on three or more psychotropics tended to perceive psychotropics more negatively than youth on two or fewer. Because there is an increased likelihood of adverse events when a child is prescribed multiple psychotropics, these researchers assert that negative perceptions are not unexpected and further justify why high psychotropic utilization needs to be evaluated (Foltz & Huefner, 2014). Regarding decision-making, a qualitative study by Moses (2011) revealed that 62% of foster

youth (ages 12 to 18 years) interviewed would discontinue psychotropic medication if there were no external pressures to commit to them. One of the foster adolescents interviewed felt forced to take psychotropics and stated:

I just don't think I need it. I don't think it's doing nothing for me, but I don't say nothing about it... It make me feel slow.... But if I don't take it, I can't get up outta here (residential facility). (p. 102)

The youth who were less committed to these medications were more likely to report negative experiences with psychotropics, such as “embarrassment or fear of social stigma, perceiving no need for medication, feeling ‘different’ or unlike themselves, side effects, and worries about longer-term effects” (Foltz & Huefner, 2014, p. 94). When asked about reasons they continue to take psychotropics, these children reported worries about their symptoms when not taking these medications, showing fear of consequences rather than recalling positives of the drug (Moses, 2011). Various studies have shown that foster children have negative perceptions of psychotropics, due to stigma or the possibility that they are forced to use them.

Social Workers and Foster Parents. Different stakeholders within the foster care system, aside from the children, have demonstrated divided opinions on psychotropics. Social workers and foster parents will be categorized together in this section due to similarities in level of intimacy and care for foster youth. It is important to account for these different perspectives considering the roles both social workers and foster parents occupy with their profound involvement in foster youths' lives.

Barnett et al. (2016) found that a majority of thirteen foster parents, from a northeastern state, have expressed disagreement with polypharmacy, or usage of multiple psychotropics, and long-term prescriptions of psychotropics. Their concern has risen from factors such as the

negative stories heard from other parents, lack of information given by the prescriber, and uncertainty about the efficacy of psychotropics in alleviating their children's symptoms.

Furthermore, one foster parent displayed disappointment about clinicians not attempting to use other treatment options before prescribing psychotropics:

I think there should be more efforts to utilize other options besides the drugs, and the challenge is it requires more effort, more people. That's certainly a constraint within our society, because a drug is easy. You give them a drug and they calm down, but it doesn't take into account the long-term impacts and ancillary impacts, so I think it's a broader issue... There has to be alternatives, and those alternatives, I think are going to require more human effort. The challenge is human effort requires funding. (p. 209).

Research on foster parents' beliefs about psychotropics is limited, but current evidence indicates that there is a disconnect between foster parents' expectations and clinicians' prescriptions.

A national study on social workers by Moses et al. (2006) revealed that social workers neutrally perceive psychotropics, with many of them believing this class of drugs to not be necessarily harmful nor always beneficial to foster youth. Furthermore, most social workers in this study disagreed that prescribing psychotropics to youth would send a negative message or would worsen the problem, countering other perspectives on the dangers of long-term psychotropic use. Despite these responses, these social workers did not believe that psychotropics should be the sole treatment option for a child; rather, they should be used as a supplementary treatment alongside non-medicative options (Moses et al., 2006). Another study by Hughes et al. (2020) reported social workers' criticism of the culture of medicine influencing other adult figures, such as teachers, who blindly encourage medicating youth with the main goal of managing behavior. One participant stated:

I think just the culture and just everyone around here really kind of thinks that meds are needed. I see a lot from schools very quickly of trying to pursue or trying to reinforce the parents in getting the kid in for a med evaluation. Seeing what kind of meds they need instead of trying to figure out other ways to address that at school..... the schools just so quickly want to kind of control that behavior. (p. 6)

As foster parents express dissatisfaction with the lack of discussion of alternative treatments, and social workers observe an overreliance on these medications, there is a need to reconsider the use of psychotropics as primary solutions.

Advocates, Researchers, and Physicians. Researchers, advocates, and physicians are placed in the same section as all act primarily as professionals who engage with foster youth to some degree but are not as involved with them as social workers and caregivers. Several advocates, ranging from politicians to attorneys, have actively opposed psychotropic prescriptions. In their joint letter to the directors of Child Welfare, Medicaid, and mental health agencies in Washington D.C., Sheldon et al. (2011) argued that there is a lack of clinical data on psychotropics' effects on children and adolescents, with the most information being provided from adult populations. Due to the limited research on psychotropic's effects on children, we are unsure whether they will harm them in the long run. In addition, the same authors commented on the limited evidence regarding the efficacy of utilizing multiple psychotropics and the increased likelihood of adverse side effects such as these drugs negatively interacting with each other. As a result of the high utilization of psychotropic medications, political stakeholders have become more aware of these circumstances and are attempting to create policy changes by advocating for foster youth.

Similar to social workers' perceptions, researchers have suggested that medications may be often used to help caregivers and teachers manage, and not treat, children despite the fact that the issue is more than behavioral management (De Sá, 2014). It is crucial to consider these findings because rising psychotropic utilization can further affect this vulnerable population, and promoting them for inappropriate reasons, such as causing fewer problems for adults, does not solve the main issue. Furthermore, one study in Ohio by Tan et al. (2022), revealed that being in foster care did not predict increased odds of antipsychotic prescriptions, but rather, a higher number of placements did. Although medication can benefit a child to some extent, other detrimental factors in foster youths' lives, such as placement instability, should be target areas for treatments according to these findings.

Pediatric psychiatrists' largest concerns of psychotropics are polypharmacy (or multiple medications prescribed to one youth), inappropriate usage of medications, and lack of monitoring (Perry et al., 2019). Doctors believe that educating foster youth and caregivers on medications, such as their side effects, how to monitor them, and the consequences of refusing medication, is a beneficial practice (Simmel et al., 2021). Barnett et al. (2020) found that clinicians, such as pediatricians and mental health professionals, felt pressured to use these medications to solve complex mental health problems in order to provide relief to families. These clinicians also acknowledged that there is a risk of overprescription of psychotropic medications for a variety of reasons, including children receiving more psychotropic medications from other providers and foster parents failing to comply with prescription directions (e.g., inappropriate usage for off-label purposes, taking the medication themselves, and/or selling them). This same study also demonstrated pediatricians' concerns about polypharmacy and the adverse side effects such as altered personality and weight gain (Barnett et al., 2020). Despite these worries, doctors believe

that psychotropics can be valuable when properly used and when foster parents and children are informed of realistic expectations. Overall, psychotropics have proven to be significant drugs in the foster care system, where behavioral problems are prevalent, but these drugs may also produce physiological and mental changes in an already vulnerable population.

Therapies

Therapy may be an appropriate option for a child with mental and/or behavioral symptoms as it offers them a space to discuss their trauma, work through their thoughts, and learn skills in emotional regulation and/or social interactions (Solchany, 2011). Common forms of therapy used by younger children include child-parent psychotherapy (CPP), where the child and parent(s) are treated together, and play therapy, which advocates for children to express their thoughts and inner conflicts through play. Dialectical behavior therapy (DBT), which targets emotional regulation and handling stressful situations, and cognitive-behavioral therapy (CBT), which analyzes the client's thinking that leads to certain behavior patterns, are utilized by older children and adolescents.

Child-parent psychotherapy (CPP) addresses a child's relationship-forming issues and specifically involves birth parent participation to help the child develop healthy, secure attachment and social functioning (Solchany, 2011). According to Lieberman et al. (2018) CPP is a relational treatment for younger children (from infancy to 5 years old) who have displayed mental or behavioral disturbances due to exposure to trauma. These authors state that the primary goal is to help parents create a physically and emotionally safe home environment by first establishing appropriate relationships between the child and parent(s). CPP is unique in that it involves the treatment provider and parent co-treating the child by developing a treatment plan that aligns with the family's specific values (Lieberman et al., 2018). The first sessions usually

begin with the parent retelling the traumatic experiences the child has undergone to the therapist, followed by the therapist observing how the child and parent interact. The next sessions involve unraveling any history of trauma or mental health disturbances the parent may be going through. Once these factors have been established, the therapist and parent will discuss what treatment needs to be given (Lieberman et al., 2018). For example, the parent will typically be encouraged to play with their child. Although seemingly simple, play is valuable as it helps foster emotional closeness with the young child who has few ways to communicate or interact with the parent due to the developmental stage they are in. In play therapy, the parent acts as the agent of change, and they are expected to develop deeper empathy and understanding towards their child throughout these sessions and after the treatment is completed. According to a study conducted on children with unresolved child welfare cases, only 2% of preschoolers who received CPP were placed in foster care a year after treatment (Lieberman et al., 2015). In comparison, 21% of preschoolers from the same study, who were not given CPP, entered foster care a year after. These findings reveal that CPP has strong potential in helping children develop better relationships with their parents and, thus, avoiding their entrance into foster care. It may also be possible for a child, who is already in foster, to achieve reunification with their birth parent(s) through CPP.

Cattanach (2000) proposes that children who are unable to directly talk about trauma may develop a personal and social identity through play therapy. Play therapy involves a therapist listening and encouraging a child to tell narratives about themselves and those around them in hopes of healing the child. Play therapy was developed specifically for younger children (ages two to twelve years) who are not developmentally able to communicate complex feelings and thoughts, but rather communicate through activities or more imaginative storytelling (Cattanach,

2000). The act of play gives them an outlet to express these emotions in ways they are capable of. For example, while an older child may demonstrate worries about loved ones leaving them, a younger one may convey the same message by initiating a game of hide-and-seek (Clausen et al., 2012). Because of the creative ways a child may respond, the therapist must use a nonjudgmental, accepting, and empathetic approach to conversing with them while also allowing the child to take the time to play out the issues on their mind (Fall et al., 1999). Research by Bratton et al. (2005) examined the efficacy of play therapy across 93 studies, involving a total of 3,248 girls and boys who participated in play therapy. Based on their research, these authors suggest that play therapy has proven to be a viable intervention that is equally effective across gender and age. Moreover, after play therapy, children had better functioning relationships with their families than those who had not received play therapy, indicating that play therapy can have a profound effect on behavior (Bratton et al., 2005). It appears that this type of therapy can strengthen foster families which could lead to the prevention of further placement instability, which is an important step in improving the lives of foster youth.

Regarding therapy for older children, Solchany (2011) declares dialectal behavioral therapy (DBT) to be beneficial for adolescents as it promotes emotion management and the ability to handle stressful situations. DBT specifically helps individuals (ages 8 to 13 years), who display emotional dysregulation (Miller, 2007). According to DeRosa and Rathus (2013), therapists use specific methods such as requiring the client to keep a self-monitoring checklist in which one would write down daily emotions, behaviors, and skills. Furthermore, the therapist would demonstrate skills to the adolescent, including:

Mindfulness skills to focus a nonjudgmental attention on the present moment; skills to increase their tolerance of distressing emotions including specific ways to distract, self-

soothe, and use visual imagery and breathing techniques; skills to enhance communication even in the face of distrust or alienation; and skills that would enable them to act the opposite of the urges associated with shame and fear (DeRosa & Rathus, 2013, p. 229).

Youth who have been treated with DBT have experienced a decrease in mental health-related symptoms, specifically in suicide ideation and self-harm (Quinn, 2009). Although not every foster youth will experience these severe symptoms, DBT can be helpful in preventing them from occurring in the first place by giving foster individuals the emotion management skills to deal with difficult situations.

Lastly, cognitive-behavioral therapy (CBT) emphasizes deconstructing the negative thoughts that may be the cause of improper behavior (Racusin et al., 2005). During CBT sessions, the child's (usually ages 3 to 18 years) behavior is modified through the building of techniques like coping, using reward systems to change behavior, acting out proper behavior, and identifying the emotions felt prior to certain behavior (Kendall, 1993); rather than the therapist telling the child exactly what to do, the child is given the opportunity to experiment with what works best for them. This intervention has been effective in treating children with aggression, anxiety, depression, and conduct disorders (Kendall, 1993; Racusin et al., 2005). As per Racusin et al. (2005), trauma-focused CBT can especially benefit children and adolescents with anxiety, such as PTSD, or those who were exposed to violence and abuse. Moreover, they found that a different form of CBT, family-based CBT, was effective in treating children, but especially when family members and caregivers were involved in the treatment process. Cognitive-behavioral therapy and its various forms give children and adolescents the ability to understand their behaviors and actions as well as ways to overcome these difficulties. Contrary to behavior

management, CBT's goal is to empower the individual to change their behavior because they have found a purpose to do so—not solely because they were requested to.

Child Behavioral and Parent Training Interventions

This category is described as mental health and behavior-altering programs that may involve child and/or parent participation in group settings. According to Hambrick et al. (2016), these interventions with high levels of empirical evidence (Table 1) include, but are not limited to, Attachment and Biobehavioral Catch-up (ABC), Fostering Healthy Futures (FHF), Incredible Years (IY), Keeping Foster Parents Trained and Supported (KEEP), and Kids in Transition to School program (KITS).

Table 1

Characteristics of Five Child Behavioral and Parent Training Interventions

Interventions	Setting	Components	Participants	Duration
Attachment and Biobehavioral Catchup (ABC)	Home	Parent education Parent-child interactions	Children ages 0 to 2 years and foster caregivers	10 weekly sessions
Fostering Healthy Futures (FHF)	Community	Individual mentoring Skills groups	Children ages 9 to 11 years that were recently entered foster care	30 weekly mentoring visits 30 weekly skills groups
Incredible Years (IY)	Varied included: Mental health service delivery site Child welfare agency Classroom-like setting	Varied included: Parent Management Training Foster & biological caregiver collaborating parenting training	Varied included: Foster caregivers & biological parents with children 3 to 10 years old Foster caregivers and children 8 to 13 years old	Varied included: 12 weekly sessions 12 2-hour child group sessions, 3 2-hour parent groups

			Foster caregivers & children 5 to 8 years	
Keeping Foster Parents Trained and Supported (KEEP)	Varied included:	Group parent training	Varied included:	16 90-min weekly sessions
	Community	Homework	Foster caregiver & child ages 5 to 12 years (in homes)	
	Mental health service delivery site		Foster caregiver & child ages 4 to 12 years (in home)	
	Home			
Kids in Transition to School (KITS)	Community	School readiness group	Foster caregivers & children entering kindergarten	4 months (2 months prior to kindergarten and 2 months later)
		Caregiver group		
		Homework		
				24 child school readiness sessions, 12 caregiver workshops

Note. Five specific behavioral interventions and information on where each intervention is implemented (setting), what the intervention aims to do (components), which foster care age group the intervention targets (participants), and the length of the intervention (duration) are illustrated in this table. Selected data reproduced from “Mental Health Interventions for Children in Foster Care: A Systematic Review”, by E. P. Hambrick, S. Oppenheim-Weller, A. M. N’zi, and H. N. Taussig, 2016, *Children and Youth Services Review*, 70, 65–77, p. 70-74 (<https://doi.org/10.1016/j.chilyouth.2016.09.002>). Copyright 2016 by Elsevier Ltd.

As per Hambrick et al. (2016), these interventions “address outcomes across behavioral, internalizing, cognitive/academic, and physiological domains” (p. 68). These programs may also show beneficial results. For instance, parents who completed the IY intervention, which teaches foster and biological parents the skills to collaborate with and manage foster children, reported using more positive discipline than those who did not complete them. Additionally, the diversity

of intervention types is beneficial in that it allows for a wide range of options for foster families to choose from. Hambrick et al. (2016) suggest that because these interventions differ in terms of settings, duration, and characteristics, the foster care team may determine which program best suits the child without settling for a less-preferred intervention.

Contrary to the positive features of child interventions and parenting programs, there are also ambiguous perceptions of their anticipated results. Weisz et al. (2013) argue that these interventions may not produce the expected outcomes in every setting or with every population of foster children. These researchers theorize that interventions may not be as effective in improving behavior in high-risk populations of children, such as foster children with complex mental health problems. There are also challenges regarding the consistency of these programs during a child's transition into a new foster family, especially when considering foster parents' participation. Although these programs have further developed to meet a variety of needs, issues with retention rates and the lack of reliable outcomes pose obstacles to their systematic implementation as a treatment standard (Hambrick et al., 2016).

Treatment Foster Care (TFC)

According to Jonkman et al. (2012), once a child has experienced multiple placements due to frequent behavioral problems, institutional placement (e.g., psychiatric hospitals, residential treatment centers, or incarceration) is inevitably the next and last option. Treatment foster care (TFC), created as early as mid-1970s, is an out-of-home placement intended to prevent institutionalization and is provided by foster parents who are specifically trained to meet the needs of these high-risk children (Meadowcroft et al., 1994). These homes are an intermediary between traditional foster homes and group residential placements. Bustillos et al. (2021) state that the goal of TFCs is to stabilize a child and prepare them to transition back into

traditional foster care within a family-like residency, providing them with higher levels of services. Because of this, TFCs are even more of a temporary solution than regular foster care, and children, on average, spend about six to nine months in these homes. TFCs emphasize therapeutic family environments, aim to clinically treat a child's emotional, behavioral, and medical needs, and involve specially trained foster parents.

As stated by Meadowcroft et al. (1994), TFC provides intensive therapeutic services for foster children whose needs are greater than those of foster children placed in non-treatment homes. TFC largely relies on several foster parents, working as a team under one home, to be the primary drivers of change. They are expected to implement the interventions on their own; however, mental health professionals can be accessed outside of the program in external facilities (Meadowcroft et al., 1994). One specialized form of TFC is Multidimensional Foster Care (MTFC), which uses a multi-faceted approach involving three components: MTFC parents, the birth family, and the treatment team (National Institute of Justice, 2011). The MTFC parents, as explained by National Institute of Justice (2011), must supervise the youth, deliver individualized treatment plans to each child, work in close cooperation with each child's caseworker, and convey information to the treatment team about each child's behavior on a daily basis. The institute describes the treatment team as a family therapist, an individual therapist, a child skills trainer, a telephone contact person for the daily reports, and a program supervisor who supports and meets with the MTFC parents. This team is also responsible for creating each child's treatment plan. Furthermore, the birth family is also treated, in a way, through family therapy with the foster child and parent training sessions (National Institute of Justice, 2011). Considering the differences between age groups, age-dependent versions of MTFC have been

developed, such as MTFC-P (for preschool children), MTFC-C (for children ages 7-11), and MTFC-A (for adolescents ages 12-17) (National Institute of Justice 2011).

An early study by Chamberlain and Reid (1991) examined the outcomes of 20 previously hospitalized adolescents, with half of them being placed in TFC homes and the other half being in the control group. These researchers reported that adolescents who were enrolled in TFC experienced placements *outside* of the hospital (and in residencies) more often than their non-TFC counterparts. With these results, Chamberlain and Reid (1991) argue that TFC, and its competence-building features, may be an effective alternative to psychiatric hospitalization. Another study, by Reddy and Pfeiffer (1997), analyzed the efficacy of TFC across 44 studies published from 1974 to 1996. They found that the largest effects of TFC on a child's outcomes were improvements in children's social skills, however, behavioral problems were not largely impacted. In more recent years, Bustillos et al. (2021) found that TFCs are correlated with children improving their emotional management and daily functioning, exhibiting fewer behavioral problems, and developing resiliency skills. TFCs have also produced better outcomes regarding placement stability, child reunification with biological parents, and decreasing caregiver stress. Compared to hospital facilities, TFC offers a less expensive mode to caring for a foster youth while also emulating a family-centered environment, which is a significant feature of TFC (Reddy & Pfeiffer, 1997).

Despite the benefits of this program, TFCs are not well-established due to difficulties in recruiting and retaining foster parents (Bustillos et al., 2021). As a result, TFC homes are not as accessible to foster children, regardless of their levels of risk, compared to the treatments previously mentioned. Furthermore, as outlined by Meadowcroft et al. (1994), TFC programs vary by the "children served; treatment parent selection, training, and supervision; staff

expertise; involvement of children's families; and frequency and types of interventions used to help children adjust" (p. 575). In addition to these uncontrollable variables, researchers are not fully aware of what specific aspects of TFC contribute to positive outcomes (Meadowcroft et al., 1994). Even though treatment foster care can have beneficial effects on the lives of children, foster caregivers, and potentially the biological family, it is not widely available to every foster youth and research on its most effective features is limited.

Review of an Existing Comprehensive Treatment Model

To address the need for a systematically implemented model for treating foster children with differing severities of behavioral symptoms, Fisher et al. (2009) developed four levels of care. These researchers, all heavily involved in the development of foster care interventions, utilized their previous studies to create this model. The four options they have outlined, ranging from low- to high- intensity programming, are: 1) Screen and Refer, 2) Enhanced Foster Care, 3) Targeted Foster Care Interventions to Address Specific Needs, and 4) Multidimensional Treatment Foster Care (MTFC).

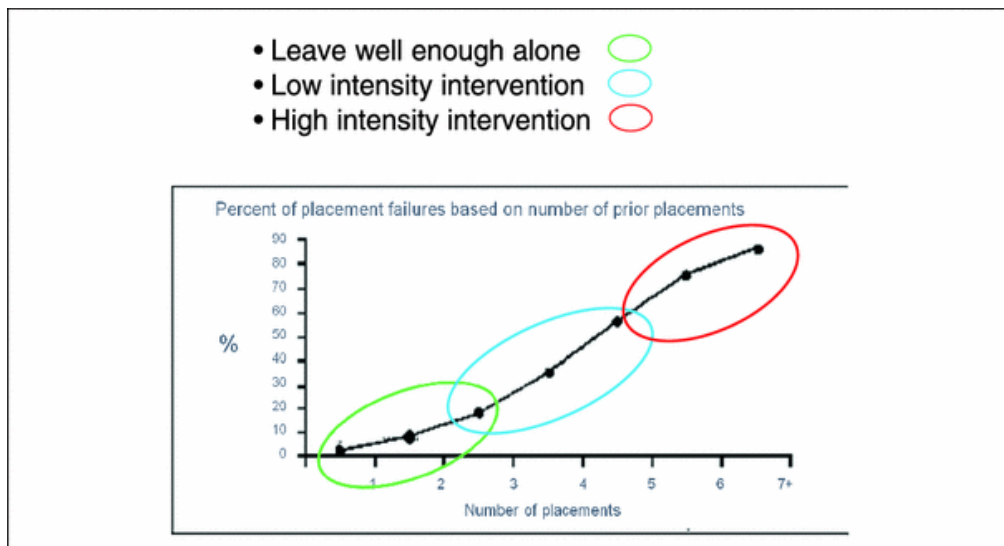
According to Fisher et al. (2009), the first level, Screen and Refer, recommends foster parents to continue supervising the foster individual with a careful eye in case they display behavioral symptoms which a doctor could address. Children in enhanced foster care are enrolled in a specialized level of foster care that provides them with additional services similar to those given to children living in a non-foster care environment. At the third level, Targeted Foster Care Interventions, children who have already displayed mental health or behavioral health symptoms attend short-term programs that enable them to learn behavioral skills and manage their emotions. Lastly, MTFC would be employed once a child has shown enough symptoms or

specific behavioral needs that an unspecialized foster parent would be unable to address. The child may be moved to a residential treatment facility that houses other foster children, with several specially trained foster parents caring for them (Fisher et al., 2009).

In addition, the authors hypothesize relationships between placement instability and the needed intensity of treatment (Figure 2). They predict children who have experienced low placement disruptions are doing well enough without any treatment or intervention, while those experiencing higher rates require high-level treatment. As in Fisher et al. (2009), it is believed a child who has experienced several placements is likely to have a behavioral condition or, at the very least, symptoms that may be strongly correlated with these placements. Because of their high-level needs, these youth would need more intense care compared to an individual who has not experienced as many placements. A positive feedback loop is speculated to exist between placement disruptions and behavioral problems, where one increases the other, and addressing the problems of one may also improve the other (Fisher et al., 2009).

Figure 2

A Graduated Approach to Preventing Placement Disruptions in Foster Care



Note. This diagram by Horwitz et al. (2010) demonstrates how the treatment model by Fisher et al. (2009) associates placement instability and the intensity of necessary interventions. From “Improving the Mental Health of Children in Child Welfare Through the Implementation of Evidence-Based Parenting Interventions”, by S. Horwitz, P. Chamberlain, J. Landsverk, and C. Mullica, 2010, *Administration and Policy in Mental Health and Mental Health Services Research*, 37(1-2), p. 29 (<https://doi.org/10.1007/s10488-010-0274-3>). Copyright 2010 by Springer Science+Business Media, LLC.

Option 1. Screen and Refer

These researchers’ first option focuses on surveilling foster children, starting from when they enter foster care and especially during any placements into different homes. Rather than assuming that only children who exhibit problem behaviors at entry will require screening and referring, Option 1 promotes continuous monitoring of *every* child to ensure each one is functioning well within the system (Fisher et al., 2009). According to these researchers, this option considers the foster care system, itself, to be a type of intervention for certain individuals. For example, another study by Fisher et al. (2006) demonstrated that some foster children can remain in foster care without having developed severe emotional or behavioral concerns. Moreover, they concluded that competent caregivers that can protect a younger child from external stressors may promote resiliency in the process. Although foster youth have experienced adverse events, if the caregiver is responsive and the child does not encounter problems while in foster care, then the child may prosper, as much as possible, within their current foster home (Fisher et al., 2006).

In relation to the theory of low placement disruptions equating low-level behavioral intervention needed, Chamberlain et al. (2008) found that children who were reported to have

lower rates of behavioral problems (0 to 6 problems a day) were also less likely to experience placement disruption, or re-placement into a new home. This research shows support for surveilling children's behavior daily, as tracking behavioral problems may help gather information in determining which child may benefit from supplemental services (i.e., a child with more than 6 problems a day) (Fisher et al., 2009). A second study (Fisher et al., 2005) on foster toddlers showed that children with two or less prior placements had a greater than 80% chance of achieving permanency than children with four or more prior placements. This also supports the hypothesis that children with higher placement instability would require greater services to achieve some form of permanency (Fisher et al., 2009). This evidence suggests that some children may thrive under foster care conditions; rather than viewing this approach as a means of doing nothing, it should be considered as a method of carefully monitoring children to determine what is best for them before assuming that behavioral services are required.

Option 2. Enhanced Foster Care

After screening measures are conducted and a need is identified, the authors assert that supplemental resources, including after-school and recreational activities and even counseling, should be offered. This would involve enrolling the child in Enhanced Foster Care (EFC). Enhanced Foster Care, which is available in specific states, provides an elevated level of care through individualized treatment plans, weekly individual therapy for the child, family therapy, a crisis plan, and additional training for families (Oklahoma Human Services, n.d.)

To support this, Fisher et al. (2009) claim that adults who were provided with Enhanced Foster Care activities as a child reported having better physical and mental health outcomes compared to former foster youth who were not given these resources. For example, research by Kessler et al. (2008) compared outcomes between private versus public foster care alumni in

Oregon and Washington. They found that individuals formerly in public foster care experienced a higher prevalence of mental health disorders, such as depression (12% more), anxiety disorders (6% more), and substance abuse disorders (6% more) than their private foster care counterparts. Moreover, these researchers reported that caseworkers in these private programs have lower caseloads, enabling them to put more time into each foster youth's case than caseworkers in public programs. Lastly, Kessler et al. (2008) suggest that the private program alumni's positive foster care experiences were due to greater access to resources (e.g., 60% higher stipend per child than public programs; access to mental health counseling, tutoring, and summer camps), and may be associated with these better outcomes and stable placements (about 33 months of remaining in one home vs. public program individuals remaining for 13.3 months).

Enhanced Foster Care is favored as it addresses the under-funded state of regular foster care, which may be an underlying cause for the negative outcomes in youth (Fisher et al., 2009). Supplying a child with adequate resources, such as those given to private program youth, could make a large enough difference in this system. The goal of this option is to unveil the under-resourced nature of foster care and the fact that additional resources could improve this population's health (Fisher et al., 2009)

Option 3. Targeted Foster Care Interventions to Address Specific Needs

The third level promoted by Fisher et al. (2009) is based on the hypothesis that children with certain behavioral problems will require higher forms of services, such as targeted interventions and programs, that the lower-intensity option of enhanced foster care would not be able to address. Components of foster care-specific interventions may range from training foster parents on effective disciplinary techniques, to teaching children the skills needed to regulate their emotions and avoid disruptive behavior. There are several program types developed by

researchers within the field of foster care, however, the program type given to a youth and/or their foster parents depends on the family's specific needs (Fisher et al., 2009).

Examples of targeted interventions introduced in this text (Fisher et al., 2009) include Project Keeping Foster Kin and Parents Skilled and Supported (Project KEEP), which provides foster parents with group training skills to help target their children's behavioral problems (Chamberlain et al., 2008). Children who completed this 16-week long program had higher rates of reunification and lower rates of disruption compared to those who did not participate in KEEP. Because parenting techniques were also taught alongside addressing children's behavior, the researchers believed that the positive parenting skills taught during this program were correlated with children's reduced behavior problems (Chamberlain et al., 2008). Despite these findings, Fisher et al. (2009) acknowledge that this intervention has not been tested for long-term effects, and thus, these associations need to be reviewed with caution.

Another example these authors highlighted is Kids in Transition to School (KITS), which targets academic preparation for younger children in foster care (Pears et al., 2007). KITS was created, by Pears et al. (2007), with the intention of preparing foster children for academic readiness through teaching early literacy, social-emotional competence, and self-regulation skills. Foster children in this program would attend playgroups two times a week throughout the summer before entering kindergarten and would meet up less often once school has started. Furthermore, foster parents would attend support groups twice a month to discuss how to aid their children in literacy and how to improve and manage their children's problem behavior. While there are only short-term results of KITS outcomes, data from their pilot study revealed that KITS had positive effects on children's self-regulation and peer relationships. (Pears et al., 2007).

Option 4. Multidimensional Foster Care (MTFC)

As the highest-level option for children with high placement instability, MTFC aims at caring for children with severe emotional and behavioral conditions (Chamberlain, 1994). Components of MTFC were previously stated in the current treatment types section of this thesis, however, Fisher et al. (2009) brings up evidence for MTFC as their fourth option. For example, a study by Leve et al. (2009) has revealed MTFC's positive outcomes, such as permanency (even in children with multiple placement disruptions), youths' appropriate attachment to caregivers, lower foster parent stress levels, and reduction in adolescent delinquency and subsequent incarceration. According to Fisher et al. (2007), child stress (as measured by cortisol levels) is associated with foster parents' stress levels, which are also associated with children's behavior problems. Other researchers state that foster parents involved in MTFC have reported lower stress levels compared to parents in general foster care (Fisher & Stoolmiller, 2008). Overall, Fisher et al. (2009) has provided substantial evidence stressing the need for MTFC for foster youth who may require more specialized attention and aid than individuals with less behavioral problems. MTFC can be considered as a last resort when all other options have not demonstrated similar effectiveness in improving the foster youth's outcomes, particularly in terms of placement stability and avoiding incarceration (Fisher et al., 2009).

Improving Existing Model: A Proposal for a Holistic Approach

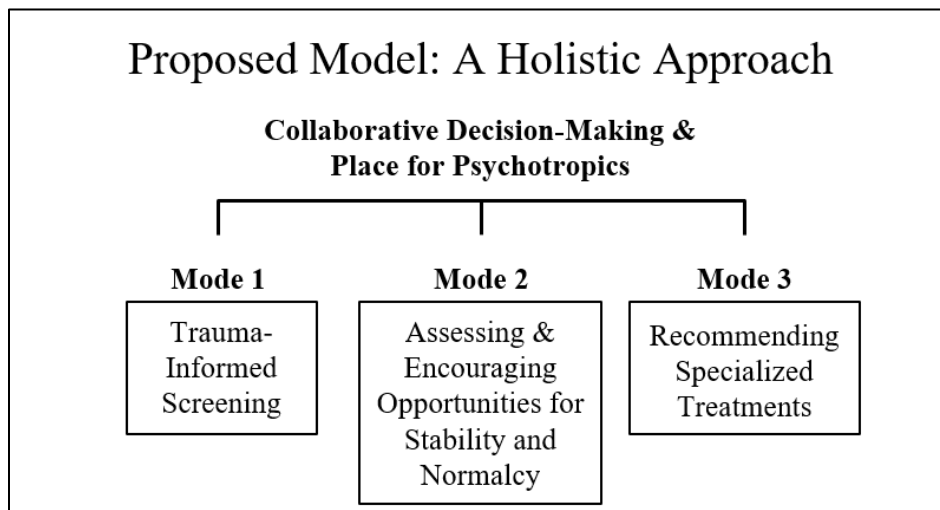
The goal of this proposal is to implement a holistic approach to managing foster children's psychological needs. Psychotropics are widely prescribed in our current medical system, however, behavioral interventions should not be the only options considered; there must be a middle ground between these two practices. This model utilizes principles of the model

created by Fisher et al. (2009) as a foundation while also addressing its limitations. It also promotes caregivers and providers to holistically heal a child by examining parts of the individual's life that have been disrupted due to placement instability. The original hierarchical organization of the model by Fisher et al. (2009) implies that each step is taken mutually exclusive of the others, restricting the treatment options caregivers and physicians may consider. The adjustments in this new model encourage physicians to carefully inspect the best treatment(s) depending on the needs of each child rather than simply checking off boxes.

In order to introduce the proposed approach, an overview of the importance of collaboration between healthcare professionals, caseworkers, foster parents, and foster youth must be provided, as well as examples of team-based decision-making, such as patient-centered care and peer-to-peer physician consultations. The modes of treatment, which may be utilized simultaneously or alone, include Mode 1, Trauma-Informed Screening, Mode 2, Assessing and Encouraging Opportunities for Stability and Normalcy, and Mode 3, Recommending Specialized Treatments. Figure 3 illustrates the proposed model and its components.

Figure 3

Visual of Proposed Model



Note. This diagram visually depicts the model’s three modes (Trauma-Informed Screening, Assessing & Encouraging Opportunities for Stability and Normalcy, and Recommending Specialized Treatments) and the collaborative decision-making that must occur throughout this process. Psychotropic prescriptions may occur at any point of the treatment, but the other modes should also be considered. Own work.

Navigating Options with Collaborative Decision-Making

An important aspect that was not addressed in the previous model was the manner in which physicians decide on a treatment option. Before any treatment model can be implemented in practice, an expected approach to decision-making must be applied. While psychotropic prescriptions are a large concern, social workers and foster parents tend to contribute their dissatisfaction of decided treatment with their dissatisfaction in the lack of collaborative decision-making. Hughes et al. (2020) argue that child welfare social workers, who are responsible for “initiating, maintaining, and monitoring psychotropic drug treatment with youth” (p. 2), hold mixed feelings about the importance of their role in collaboration with the medical field. One social worker within their study stated:

I think I very much wanted to believe that the medical professionals were doing their job. That’s where I needed to be as a caseworker. I needed to say ‘This your realm; this is your lane. You do your job and I’ll do mine.’ And through that training I realized that we can’t do that. We have to take more of an active role in this...the fact that doctors are so enmeshed with the pharmaceutical companies, that was a little disturbing. (p. 4)

Given that foster parents and social workers are also responsible for monitoring a child’s health while they are on psychotropics, it is understandable that they would want equal say in the decision-making. Even mental health practitioners on the medical side of the team have found

concerns regarding collaboration. According to Kerns et al. (2014), both caseworkers and mental health practitioners view collaboration between each other to be favorable; however, communication must be improved between them. Both parties believe that communication and collaboration need to be strengthened by developing a thorough plan with expectations of routinely updating one another along with team meetings (Kerns et al., 2014). No foster care figure, such as the physician, caseworker, or foster parent, should have complete leverage to decide on a treatment alone. Although this practice is not formally taking place in patient conversations, the culture of medicine has prompted non-medically licensed individuals to feel inferior and less eligible to take a stance in these consultations.

To ensure that the physician enforces effective communication with the foster family during treatment plan discussions, I propose that physicians should utilize collaborative decision-making practices. This may be conducted through specific approaches such as Patient-Centered Care, which promotes focusing on the patient and family rather than viewing the patient as primarily the illness or diagnosis (Mezzich et al., 2016). According to Mead and Bowser (2000), PCC uses a biopsychosocial perspective, where the physician views the patient as a person, and encourages doctors to share power and responsibility with their patients. In their research analyzing whether youth perceived psychiatric care to align with PCC goals, Barnett et al. (2016) reported that youth believed psychiatrists did not offer enough information about their medications, gave little power to youth in decision-making, and had weak relationships with the patient. Additionally, patients who felt better understood by their physician and were given more autonomy in the decisions deemed these aspects helpful in their consultations (Barnett et al., 2016). Overall, shifting provider perspectives to one that considers the patient and their family as key roles in their treatment is the first step to balancing power when making decisions. Despite

these benefits, it is difficult to impose this mindset on practicing physicians who have already developed certain approaches to their work. Thus, concrete programs and interventions, such as peer-to-peer physician consultations, should be utilized to ensure collaborative decision-making, which is further discussed in the next section.

A Place for Psychotropics

Team-based decision-making is especially important when determining a treatment plan that involves psychotropic medications. Despite the negative perceptions of psychotropics, this medication has still shown proof of alleviating painful symptoms. For example, as Solchany (2012) states, youth who are self-abusive, impulsive, or have shown anger management issues may need medications to help mitigate these problems. These medications could help their physiological functioning, such as sleep, appetite, and concentration, that are best alleviated through psychotropics (Solchany, 2012). Therefore, it is significant that this model does not diminish, invalidate the credibility of psychotropics, or pinpoint the only time they should be used (as there is no distinct timing to prescription drugs), but instead, give guidance on prescribing them. While Fisher et al. (2009) did not specifically acknowledge psychotropics, I argue that they should be utilized once a need is found; however, physician consultation programs, or guidelines that mimic them on a smaller scale, should be used when administering such medications to foster youth.

Peer-to-peer physician consultation programs may ensure collaboration between the patient or the patient's family and the physician. A study by Perry et al. (2019) analyzed the effects of Indiana's consultation program, Indiana Department of Child Services Psychotropic Consultation Programs (DCSPCP), which executed peer-to-peer consultations (between a foster youth and their psychiatrist) with foster youth whose prescriptions were labeled as problematic

by Indian's Psychotropic Medication Advisory Committee. These researchers found that most youth (88%) were able to reach agreements with their physicians regarding their treatment plans. Furthermore, these youth experienced a decrease in psychotropic polypharmacy (multiple medications prescribed to one individual), off-label prescriptions (medications prescribed for unapproved purposes), hospitalizations, and costs compared to youth who did not undergo this program. In addition, psychiatrists uncovered concerns found throughout the consultation process, such as the lack of monitoring *prior* to the program (Perry et al., 2019). Thus, implementing a team-based approach where every stakeholder, especially the foster youth, is given an equal voice in the patient room may help identify adverse effects of psychotropics earlier on. With collaborative decision-making implemented, either through individual physician's practices or formal programs such as peer-to-peer consultation programs, various modes of treatment can be discussed between the physician, foster youth, and the foster family.

Mode 1. Trauma-Informed Screening

Even with the advantageous and numerous examples of effective treatments, there are limitations that Fisher et al. (2009) failed to address. The first option, or Screen and Refer, was constructed with the mindset that foster care could be a helpful treatment for certain children. Claiming that foster youth may thrive because the system itself is an intervention may be a harmful statement as it undermines the varying levels of trauma that can occur while in foster care (Bartlett & Rushovich, 2018). While some children may view certain aspects of foster care positively, the process does not always result in permanency of home and may produce more severe problems, such as relationship-forming difficulties, than what children initially had when they entered the system. Despite the fact that not every child's experiences before and during

foster care may manifest into behavioral problems, we cannot certainly assume that a foster child with low placement disruptions does not have current mental or behavioral health needs.

Screening should be a continuous process by physicians, caseworkers, and foster parents, as Fisher et al. (2009) states—but trauma-informed practices should be applied as well. Trauma-informed care (TIC) is an approach to how providers serve those who have undergone trauma, which includes but is not limited to, being aware of their circumstances, keeping an open-mind throughout conversations, and acknowledging their sensitivities (Strait & Meagher, 2020). As described by The National Child Traumatic Stress Network (n.d.), TIC involves all parties “recogniz[ing] and respond[ing] to the impact of traumatic stress on those who have contact with the system including children, caregivers, and service providers” (p. 1). As per Dr. Alefiyah Malbari, a pediatrician whose work has involved treating foster children, TIC involves a physician approaching patients without assumptions such as when screening a child’s health, asking them questions regarding their family or medical history, or overall, conversing with them (A. Malbari, personal communication, August 16, 2022). Being sensitive to the aspects of trauma a youth shares allows the patient to open up and develop trusting relationships with their provider. In specifics, a trauma-informed perspective is one in which agencies, programs, and service providers apply the following:

- (1) Routinely screen for trauma exposure and related symptoms;
- (2) use...culturally responsive assessment and treatment for traumatic stress and associated mental health symptoms;
- (3) make resources available to children, families, and providers on trauma exposure, its impact and its treatment;
- (4) engage in efforts to strengthen the resilience and protective factors of children and families impacted by and vulnerable to trauma;
- (5) address parent and caregiver trauma and its impact on the family system;
- (6) emphasize

continuity of care and collaboration across child-service systems; and (7) maintain an environment of care for staff that addresses, minimizes, and treats secondary traumatic stress [as a product of listening to firsthand experiences of trauma of another], and that increases staff wellness. (The National Child Traumatic Stress Network, n.d., 1)

In general, physicians are expected to enforce three specific components of TIC: 1) preventing the assumption that trauma responses come in a single form, 2) emphasizing physical and emotional safety for the patient, and 3) applying TIC beyond consultations and throughout the organization or clinic (Berg, 2022). According to Berg (2022), trauma is highly individualized, therefore, no physician can define a patient's trauma. To avoid making assumptions about trauma responses, physicians are expected to unlearn stereotypes about them. Based on the stereotypical view of trauma survivors, a physician may be unable to distinguish if a patient has undergone trauma if they present positively in front of the physician (for instance, smiling throughout their interactions). The physician must acknowledge that a patient's outward presentation does not reflect their personal experiences. Therefore, anyone who enters the clinic may potentially be a trauma survivor. Once this is understood, it becomes easier to navigate the conversation in a way that creates a safe space for the patient; using this highly sensitive lens, the physician may also observe certain cues or details of their conversation that could help to unravel any underlying experiences that are physically and/or mentally affecting the individual.

Whether or not a child exhibits behavioral disruptions in a family home, trauma-informed skills should be applied to all children in foster care. As previously mentioned at the beginning of this thesis, trauma can occur at any point before, during, and even after foster care due to the instabilities and lack of permanence associated with the foster care system. Being aware of the position a foster youth may be in and acknowledging the complexities of the system could

potentially improve consultations between the foster family and the physician. Utilizing TIC and the safe environment it produces also lends way for any special needs to slowly emerge from the patient themselves, starting the process of identifying issues (A. Malbari, personal communication, August 16, 2022). Even with its benefits, TIC has yet to become a standard practice in pediatric clinical settings. Consequently, it is of utmost importance that physicians hold themselves accountable and become proficient in TIC, which include receiving updated TIC training, in order for this method to be successful.

Mode 2. Assessing and Encouraging Opportunities for Stability and Normalcy

This second mode highly considers the influence placement stability has on behavioral disruptions, as highlighted by Fisher et al. (2009). The authors of the previously reviewed model, however, did not address the ways in which stability of activities can impact the behavior of a child. For example, Fong et al. (2006) explored the impact of continuity of activities, between previous and current placement, on foster children's well-being. Among the 103 Texas foster parents surveyed, some parents (25%) were unaware of their youth's activities before their current placement. Regardless of this, these researchers found that there was a positive correlation between continuing activities and the improved well-being of foster children. On the other hand, adding more activities, such as school-related extracurriculars, did not have the same effects on the children compared to solely keeping their same activities (Fong et al., 2006). Because of the lack of continuity of living arrangements and relationships, continuity of an aspect of the child's life that can be controlled, such as their extracurriculars, may facilitate a sense of normalization needed in a foster youth's life. If placement into a family cannot be stable, then continuity of activities might be the next best step to minimize/protect against homing disruptions. The physician should explore and assess whether stability of daily activities

is a contributing factor to the symptoms a youth displays. A physician may find it necessary to suggest, depending on the responses from the foster youth, that the foster family re-enroll the foster youth in similar recreational or extracurricular activities they participated in during their previous living arrangements.

When continuity is not enough, supplemental activities may prove to benefit the child. Fisher et al. (2009) had addressed the need for Enhanced Foster Care, and while these do provide more services and resources to foster individuals, these are hard to come across and not every state will have this specific form of foster care. On the other hand, foster parents may be able to find specialists outside of the foster care system that could provide counseling for the child. But, at the end of the day, these treatments can only be effective if the service is available to the foster family, or if foster parents have the capacity to take these youth to these facilities. It is important for medical providers to acknowledge these limitations, and find a middle ground, such as promoting the foster youth's participation in after-school activities or mentoring programs. For example, Poon et al. (2021) reported, based on nine published studies, that foster alumni-led mentoring programs can have a positive effect on foster youth, especially when they are led by mentors of the same generation as the foster youth. Ideally, foster parents should promote foster youths' long-term commitment to any additional activities they deem beneficial, as these may become an integral part of the individual's life and may even promote stability in the long run.

Mode 3. Recommending Specialized Treatments

As discussed in treatment types, targeted interventions include child behavioral and/or parent training programs. Both interventions have a variety of options (a selected number of examples outlined Table 1) depending on the needs of the foster family. A physician may, for instance, associate a foster youth's mental health symptoms with their difficulties adjusting to

foster care. Thus, the physician might recommend Fostering Healthy Futures (FHF), which focuses on individually mentoring recently entered foster youth, teaching skills that mitigate adverse outcomes and promote healthy development in this target population (Fostering Healthy Futures, n.d.). In their literature review, Hambrick et al. (2016) found that this intervention decreased placement changes and dissociative symptoms (i.e., feeling disconnected from one's own body and feeling uncertain about one's identity) in children who completed it. If parental inadequacy is linked to foster youth's behavioral difficulties (Moses et al., 2006), programs that incorporate training parents on effective ways to discipline may be necessary, such as the Keeping Foster Parents Trained and Supported (KEEP) program.

Although these interventions may be beneficial solutions to certain youth, others may need more one-on-one psychological services like therapy. As stated earlier, several forms of therapy such as child-parent psychotherapy, play therapy, cognitive-behavioral therapy, and dialectical behavior therapy have shown positive effects in pediatric populations. However, while child behavioral interventions and parental training programs are mostly utilized by the foster care population and led by foster care specialists, therapists are not required to be experienced with this population. As per Clausen et al. (2012):

Despite the fact that mental health problems in foster children are diagnostically complex and require long-term intervention, it is rare a foster child who sees the same therapist for multiple treatment sessions over a period of several months. In actuality, most foster youth are not seen by licensed mental health providers, but by case managers in the child welfare system that are heavily burdened by and thus focused on administrative agendas and requirements, not with developing relationships or with addressing mental health issues. (p. 44)

Therefore, therapy types are more likely to be effective with experienced therapists who provide safety and stability required by youth with traumatic histories and other issues such as physical, mental health, and adaptive problems (Clausen et al., 2012). For foster youth to develop a trusting relationship with the professional, the physician must consider and promote the potential of longer-term therapy interventions.

Finally, treatment foster care and its other forms, such as MTFC, should be turned to as a last resort. When multiple foster parents cannot meet a foster individual's needs, TFC may be the most effective option to avoid further detrimental effects of disruptive behavior, such as entering juvenile detention or psychiatric hospitalization. In this case, physicians should recommend TFC and provide foster parents and the youth's social worker with a formal referral to help justify the child's placement into the program.

Discussion

It is widely understood that psychotropics are largely prescribed to foster youth in clinical settings. However, researchers recommend an alternative approach based solely on behavioral interventions. Bridging these two perspectives, the proposed model incorporates both approaches and guides the physician in deciding on a treatment option. This model aims to assist doctors in understanding how daily life stability, psychological services (including psychotropics), and behavioral interventions can contribute to foster youth's healing while emphasizing the importance of shared decision-making.

Implications of Proposed Model

This proposed model was created with the hopes of being easily accessible to all stakeholders, regardless of education level, and to facilitate peer-to-peer-like conversations

among them. In theory, this would serve as a guide for physicians to implement during medical consultations with the foster parent and foster youth. Moreover, the social worker is expected to work in close contact with both authority figures. Assuming that the foster youth's team, including the foster parents, caseworkers and physicians, collaborate and make decisions together, this proposal can help the child (and potentially the foster family) heal at their own personalized pace.

Although treatments are categorized differently depending on their basis in medicine or lack thereof, Solchany (2011) states that pharmacological and non-pharmacological treatments were not intended to be used exclusively. For example, rather than only relying on psychotropics, clinicians may also prescribe a behavioral intervention or even use another psychological treatment like therapy, alongside these medications. Considering each foster child's unique needs, Monica Faulkner, a social worker who is deeply involved in foster care, notes that no single treatment should be viewed as superior to another (M. Faulkner, personal communication, November 30, 2022). This model acknowledges these perspectives and strives to allow clinicians and the foster care team decide which mode(s) is appropriate for a foster youth.

Foster youth's well-being could benefit from the variety of options available, as long as physicians, social workers, and foster parents abide by their role in the model by properly screening, referring, and monitoring the youth's health. These multi-faceted approaches take into consideration that not every child will thrive off one treatment but may need a combination of multiple, and thus, encouraging exploration of what works best in their experience and giving them their own form of autonomy. Modes 1-3 all have promising effects in their own categories, but using any as a treatment type relies on what the foster individual needs. Desired results

include facilitating open discussions about treatments among all parties rather than leaving the decisions to one party as well as improving the well-being of foster youth who may exhibit symptoms of mental or behavioral health needs. In addition to these short-term improvements, this proposal also attempts to encompass everyday life, such as through continuity of activities, in order to address the instability that may be the root cause of such symptoms.

In regards to the foster youth's team, close communication among the social workers, physicians, and foster parents are essential to the success of this model. Considering the effort that would go into each foster child's case, this model would be optimized if individuals not directly involved in the foster care system, such as physicians, were motivated to do so. For large-scale implementation of this model, physicians may be offered increased compensation for consultation and/or credits for Continuing Medical Education (program required for maintaining their medical license) to encourage this level of effort and collaboration. Moreover, increased governmental support through improved budgeting allocations is necessary so that treatment options can be considered without concern for resource accessibility, ensuring each foster care individual has their needs met.

Limitations of Proposed Model

This model has a variety of limitations, beginning with the evidence of each of the interventions listed in the modes. Because experimental studies with foster children take certain jurisdiction and approval, most research studies used were conducted with smaller, homogenous sample sizes and fail to address multiple regions or even cross-cultural contexts. Furthermore, there is a lack of literature that relies on foster children's perceptions rather than their caregivers', and thus, it is hard to assess if every intervention is viewed positively by foster youth.

Shared decision-making assumes that physicians, social workers, and foster parents are in constant collaboration with each other when, currently, that is not the case. Foster youths' health care is typically fragmented, especially with placement instability causing potential moves to different physicians. In addition, not every physician will be prompted to constantly meet with the foster care team to discuss treatment plans if there is no incentive to do so. Considering these obstacles, solely applying this model in practice in even one clinic may require a shift in mindset on the part of medical professionals.

Regarding the proposed modes, screening with trauma-informed practices may be difficult to follow through as training in TIC is not formally required by most clinical settings, and it is up to the clinic or the physician to hold themselves accountable for these practices. Continuing activities may also be challenging to enforce as foster parents may not have the capabilities to expend time and resources towards stabilizing a child's extracurriculars, especially if they are receiving a reimbursement rate that does not adequately cover the youth's care. Moreover, targeted intervention programs are not well-established or normalized throughout the nation's child welfare system and may be more utilized in certain states than others. Due to this, some foster parents would be unable to access many of these programs. Similarly, TFCs are not federally mandated, and as a result, only foster parents with the resources to devote themselves to this program can participate; thus, not every foster child would have access to TFC even if a physician determines TFC to be the best course of action.

Lastly, it is important to note that this model provides a general overview for the actions a physician should take depending on the foster youth's conditions and is not specific to a particular region. Certain treatments or healthcare benefits for a foster care child differ by state as each state has a different Medicaid insurance system which may alter how doctors interact

with youth in foster care. Additionally, we must also consider the differences between each states foster care system, as not every foster parent is given the same resources in each state depending on the level of government involvement.

Conclusion

The proposed model is based on the foundation laid by Fisher et al. (2009) for improving foster youth's mental and behavioral health and linking placement disruptions to them. Several dissatisfactions with treatment decision-making by foster youth, foster parents, social workers, and physicians prompted the revision of the previous model which did not acknowledge such aspects, particularly regarding the immediate turn to psychotropic prescriptions. I proposed three modes (Trauma-Informed Screening; Assessing and Encouraging Opportunities for Stability and Normalcy; and Recommending Specialized Treatments) that physicians should consider when treating this population; however, before using these modes, the physician must practice navigating decision-making equally among the foster care team, which may lead to determining whether psychotropics are suitable for a specific child. There are times when psychotropics could benefit the patient regardless of the mode currently used due to these medications' ability to alleviate symptoms from within. The purpose of this model is not to specify a time during which psychotropics should be administered; thus, psychotropics may be considered throughout this treatment process.

As a result of this comprehensive, holistic approach, patient education can be improved regarding treatment options. Physicians are specifically encouraged to initiate deeper discussions regarding psychotropics and the necessity of monitoring them. Foster parents and social workers may be more satisfied with the role they play when their input is largely considered in medical

decisions. Additionally, improving foster youths' health not only in their medical pathology but also in their daily living circumstances may promote stability in their lives. In the long run, a sense of stability may assist this individual in achieving either permanence in their foster home or reunification with their birth family.

Future research directions include employing this model in different regional settings to determine whether accessibility creates barriers to its use. Limitations in the ease of accessing services raise a critical point, such as the fact that most of these services may only be accessible if integrated foster care health centers are mainstreamed. For example, the Foster Care Centers of Excellence in Texas, which integrate medical professionals such as PCPs, therapists, and other services foster children may need, are located only in major cities. However, if a foster family lives away from these centers, there may be limitations to which parts of the model can be utilized. Therefore, further iterations of this holistic approach should take into greater consideration the accessibility of both medical and non-medical foster care services throughout the United States.

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Author Biography

Maisie Nievera is a current senior at the University of Texas at Austin pursuing a Bachelor of Science and Arts in Biology Honors, a Business of Healthcare Certificate, and a minor in Architectural Studies. Outside of being a member of the Health Science Scholars Honors program, she enjoys digitally illustrating for CNS publication, Catalyst, playing sports, and mentoring members of her organizations. Her experiences while volunteering, specifically as a crisis counselor at Crisis Text Line and a volunteer at Helping Hands Home for Children, inspired her to investigate treatment models for vulnerable pediatric populations. This ultimately led her to focus on foster children's health for her thesis. As an aspiring physician, Maisie will be attending UTHealth Houston McGovern School of Medicine in Fall 2023 as a medical student.