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Psychotropic Medications and Children: Perceptions of Mental Health Professionals

A Thesis
Presented to
the Faculty of Social Sciences
University of Denver

In Partial Fulfilment
of the Requirements for the Degree
Master of Arts

by
Elinor J. Brereton
June 2018
Advisor: Dr. Alejandro Ceron

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Title: Psychotropic Medications and Children: Perceptions of Mental Health Professionals
Advisor: Dr. Alejandro Ceron
Date: June 2018

Abstract

This project explores mental health professionals' perspectives on the prescription of psychotropic medications to children. It emphasizes the placement of biomedicine within its larger social, economic, and political context, and the influence these structures have on the way mental illness is conceptualized and treated in children. Eight semi-structured interviews were conducted in Denver, Colorado with psychiatrists, psychologists, social workers, and a pharmaceutical board member to capture multiple perspectives from different positionalities within the field. Participants discussed factors that they believe influence prescribing practices including: professional role changes, issues of access, limited evidence, cost, and institutional pressures to practice within a biomedical model of care. This thesis suggests that the supremacy of biomedicine has changed the conversation of mental health so drastically over the past forty years that psychological and social factors are no longer being legitimately considered as part of mental health care, to the detriment of children in need of services.

Acknowledgements

The Way It Is

*There's a thread you follow. It goes among
things that change. But it doesn't change.
People wonder about what you are pursuing.
You have to explain about the thread.
But it is hard for others to see.
While you hold it you can't get lost.
Tragedies happen; people get hurt
or die; and you suffer and get old.
Nothing you do can stop time's unfolding.
You don't ever let go of the thread.*

-William Stafford

I would like to thank my mother for her support of all my endeavors, academic or otherwise. She has been an example all my life of the benefit of reading, listening, and imagining. Thank you for showing me this poem and for believing in me.

I would also like to thank my advisor, Dr. Alejandro Ceron, for his council over the past two years. Your classes have broadened my mind and the books you have lent me have given me much to consider (even when they serve for many months as coffee coasters in my office). Thank you for your advice and guidance throughout this process, I am grateful to have been your student.

Thank you as well to my brother, who I am still competing with for “smartest sibling,” to my dad who read my entire thesis after minimal coaxing, my friends who have put up with my absence over the past two years, my cohort for their friendship and good humor, and to Michael, without whom I would never have survived this exhausting and wonderful journey.

Table of Abbreviations

DSM	Diagnostic and Statistical Manual of Mental Disorders
FDA	Food and Drug Administration
UN OHCHR	the office of the United Nations High Commissioner for Human Rights
LCSW	Licensed Clinical Social Worker
WHO	World Health Organization
SSRIs	Selective Serotonin Reuptake Inhibitors
ADD	Attention Deficit Disorder
ADHD	Attention Deficit Hyperactive Disorder

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Introduction

After graduating with a Bachelor of Science degree in psychology, I was employed in Flagstaff, Arizona as a Behavioral Health Specialist at a residential home for children. These children were either runaways, had been removed from their homes and were awaiting placement, or were part of the foster care system or the juvenile detention system. One of my duties there, depending on my shift, was to assist in the administration of medications before school and before the children went to bed. There was a giant white board, usually covered by a curtain in the office where staff could type notes and conduct shift updates. The white board included every child's name, because every child was on a medication. It listed the generic name, the brand name, the dose, and additional information such as "must be taken with food," or "make sure to cut in half before administering." What the white board did not say was each medication's intended effect. Was it to relieve anxiety? Was it help them focus? The medications were administered, crossed off a checklist, and re-administered in the evening. They were never discussed in staff meetings and we were never educated on their uses, side effects, or interactions. During one of my shifts, my co-worker who was studying to get into medical school brought his text book on pharmaceuticals, and we began looking up the medications from the whiteboard. What we discovered through that research was shocking. Some of the children were being prescribed medications at

a dosage level meant for a grown man, some were being given two medications meant to relieve the same symptom, and some had been taking a medication for several year when it was intended for short term use only.

My initial reaction was anger. These children appeared to be being given drugs to make them focus in the morning, drugs to make them fall asleep, drugs to make them completely numb. They rarely had medication reviews while staying at our facility, and because these children were constantly on the move, they rarely had cohesive care teams following up on their prescriptions. This situation is perhaps unique, and in many ways extreme, but it drove me to explore the process of prescribing psychotropic medications to children in general.

The process that results in children being prescribed these medications is important to understand and describe. Children often have little agency over their own health-related decisions, and instead decisions are usually made for them by parents and care providers. It is especially important therefore to understand this process to ensure that children with mental health issues are being cared for in informed, appropriate, efficacious, and ethical ways.

Psychotropic medications are any pharmaceutical drug capable of affecting the mind, emotions, and behaviors (Merriam Webster 2018). Their use is a comment on health, on social expectations, on politics, on industry, and on ideology, yet the mechanisms of these drugs and their long-term effects on children are often unknown even by medical professionals and the pharmacological industry. Opening up the

conversation about how and why these medications are prescribed allows for a larger conversation surrounding mental health and its relationship to pharmaceuticals and biomedicine to be had in the future.

For my thesis, I wanted to understand how mental health professionals, prescribers and non-prescribers, feel and think about these medications and their use with regard to patients under the age of eighteen. I interviewed psychiatrists, psychologists, a Colorado pharmaceutical board member, and social workers to collect a broad spectrum of experiences and explore their prescribing habits and relationships with these medications. The professionals I interviewed discussed the following factors as influencers of their prescribing practices: professional role changes, issues of access, limited evidence, cost, and institutional pressures to practice within a biomedical model of care. I discovered that many of my interviewees believed that these issues are the result of conceptualizing mental health as existing within a biomedical framework, which reduces the conversation of causality to biology and eliminates the possibility of psychological and social explanations as well as non-pharmaceutical treatments.

For this project mental illness is operationally defined as any experience of unwanted or maladaptive emotions and/or behaviors including but not limited to depression, anxiety, attention deficit disorder, obsessive compulsive disorder, eating disorders, and aggression. In other discussions of health, 'illness' is used to describe the patient's experience of symptoms, while 'disease' is the recasting of illness in terms of pathology (Kleinman 1988). The word illness is used in this thesis instead of the word

disease because several interviewees indicated that the pathology of mental health issues is often unknown and therefore it is the experiences of patients that informs the discussion of cause and treatment.

It is also important to note that this thesis is not attempting to identify the pathology of mental illness or advocate for a specific treatment. It is an exploration of the consequences resulting from mental health moving rapidly along on the continuum from social constructionism towards scientific objectivism (Conrad and Bergey 2015). It focuses on how mental health has been treated since the 1980s with the introduction of the biomedical model in mental health, how this modal shift has impacted pediatric populations, and what may be being missed due to the shift and narrowing of care models.

Chapter Summaries

The first chapter of this thesis describes the adoption of the biomedical model of care by the mental health field beginning in the 1980s. It describes the roles of professionals within the field and addresses the use of and policies surrounding psychotropic medications for children both nationally and specifically in Colorado. The second chapter introduces the lens of critical medical anthropology which I apply throughout the project. This theoretical framework places biomedicine within its larger economic, political, and social context and allows it to be critically analyzed in the same way as any other cultural system. The third chapter outlines my methodological approach which utilized qualitative data collection and analysis techniques and allowed the data to inform my overarching themes presented in the following chapter. My results are presented in three separate sections within the fourth chapter: roles and relationships, resources and access, and the biomedical model. The fifth chapter presents my discussion of these three results categorizes. It explores the placement of all these factors within the context of the biomedical model and how this framework reduces conversations regarding psychological and social factors regarding mental health. The paper concludes in the sixth chapter, which summarizes my findings and provides recommendations for further consideration of anthropologists and mental health professionals when investigating mental health, pediatrics, and the biomedical model.

Chapter 1: Context

Psychiatry in the United States

By the end of the 19th, and throughout the 20th century, psychiatrists provided both therapeutic and medical treatments for their patients (Buchanan 2003). This combination of treatments reflected the blend of organic and psychological explanations given for mental illnesses at the time. While some illnesses such as “hysteria” were treated with the removal of women’s ovaries, others such as “neuroses” were treated with hypnosis and psychoanalytic therapy (Whitaker and Cosgrove 2015). It was understood that the body and the mind interact, and treatments reflected this symbiosis, though larger social factors were not largely considered at this time (Wilson 1993).

This coupling of practice techniques remained the norm until the 1980s, which marked a drastic shift within psychiatry in the United States. Insurance companies became the predominant third-party payers, controlling coverage for patients and reimbursements for professionals, with the highest reimbursement coming from the prescription of psychotropic medications (Cummings 2015). National psychiatric institutions also began pushing psychiatry towards a biomedical model of care through the publication of the third Diagnostic Statistical Manual (DSM III) in 1980, which endorsed biological explanations for mental illness and the use of pharmaceutical

treatments (Kleinman 1988). These institutional changes and pressures from insurance companies, national psychiatric institutions, the DSM, and a collaboration with pharmaceutical companies led to a massive increase in the use of psychotropic medications for mental health issues. A comparison of the data from 1987 to almost a decade later shows an increase in the overall annual rate of psychotropic medication use in children from 1.4 per 100 persons in 1987 to 3.9 in 1996 (Olfson et al., 2002). The increase in the prescription of psychotropic medications for children reflects the changes occurring in psychiatry during the 1980s and 90s, and by the end of the 1990s psychiatrists were predominantly prescribing psychotropic medications over other therapeutic techniques (Kleinman 1988, Harris 2011).

Professional Roles in Mental Health Care

At the same time that the role of psychiatrists were changing, other mental health professions began to gain popularity. While there are many sub-fields in mental health, the primary categories are psychiatrists, psychologists, and master's level therapists, counselors, and social workers. Therapists, counselors, and social workers have a master's degree and are usually trained in one specific form of therapy such as cognitive behavioral therapy, family therapy, or drug therapy but are unable to diagnose or prescribe medications. Psychologists have a doctorate degree and are trained in a wide variety of therapeutic techniques and can diagnose patients but not prescribe them medications. Psychiatrists have a medical degree with additional training in psychiatry and can prescribe medications.

To become a psychiatrist today, one must complete four years of undergraduate school, five years of medical school, and four years of residency. This is a conservative estimate, assuming a student is taking a full-time, continuous course load throughout their education. As of 2014, the median debt for this level of schooling ranged from \$170,000 to \$200,000 (Doctorly.org 2014). The financial and time commitments this professional route takes has led to a national shortage. As of 2009 there were only 10 full time practicing psychiatrists in the U.S per 100,000 people, when it is estimated that 25.9 are needed per 100,000, leaving the United States 45,000 psychiatrists short (Konrad et al. 2009). This shortage of professionals has led to long wait times for those seeking services. For child psychiatrists specifically, the wait time ranges from 28-81 days for a first appointment (Steinman et al. 2015).

Though historically psychiatrists were trained in both therapeutic and medical practices, an industry shift towards biomedicine and the public utilization of alternative mental health professionals led psychiatrists to reaffirm their now defining qualification within the mental health market: the ability to prescribe psychotropic medications. Psychiatrists thus moved closer to an affiliation with biomedicine and rebranded themselves as doctors who treat the brain with psychotropic medications (Kleinman 1988).

Psychotropic Medications and Children

Psychotropic medications have been used for the treatment of emotional and behavioral disturbances for over half a century in the United States (Cohen 2003).

Though the prevalence of these medications has continued to increase, “no current data shows even modest improvements in the incidence or prevalence or prognosis of any condition routinely treated today with psychotropic medications, including schizophrenia, bipolar disorder, and depression” (Cohen 2003, 6). These medications are designed to manage symptoms, not to prevent, treat, or cure mental illness, because the pathology of mental illness is still unknown. Current theories however, such as the chemical imbalance theory, propose that the efficacy of these drugs is due to their ability to alter the number neurotransmitters in the brain. This implies that negative behaviors and emotions are experienced because of neurological malfunctions. Cohen writes that

...laypersons and professionals come to believe and repeat that hopelessness and depression result from inadequate serotonin neurotransmission which is remedied by serotonin reuptake inhibitors...or that restlessness and inattention in millions of American school children result from frontal lobe shrinkage and that stimulants help the brain to grow.... The reality is of course more complex: people experiencing psychological distress take drugs because they want to, or because others want them to, or because alternatives to drugs are expensive, time-consuming, demanding, and less easily available. (Cohen 2003, 10)

The use of psychotropic medications for the treatment of unwanted emotional and behavioral symptoms implies that the cause of these symptoms is predominantly biological. This organic explanation quickly gained popularity with the public, and the incidence of psychotropic prescription rates have steadily increased over the past several decades, especially amongst children (Comer et al. 2010). Comparing data from

1996 to 2007, every category of psychotropic medication has increased in prevalence amongst children with the exception of mood stabilizers, which dropped by 0.64% nationally. One of the most striking increases is the concurrent use of more than one psychotropic, which rose from 14.3% to 20.2% (Comer et al. 2010). A more recent study conducted in 2013 by The National Health and Nutrition Examination Survey collected data rates of adolescents aged 12-19 during a one month period. They found that 6.3% of adolescents reported using a psychotropic medication during that month, but that only half (53.3%) of those adolescents had seen a mental health professional in the past year. They also found that 4.5% of adolescents aged 12-19 had taken one or more psychotropic during the one month period (Jonas et al. 2013).

This practice, the prescribing of more than one psychotropic medication at a time, is referred to as polypharmacy, and though almost no research has been done to examine the long-term effects of this practice, thousands of children are receiving this form of treatment in the United States every year (Comer et al. 2010). A 2014 study found that 39.4% of patients seen by 1000 child psychiatrists between 2007 and 2008 were prescribed more than one psychotropic medication (Kearns and Hawley 2014). While polypharmacy is not inherently inappropriate, there is little evidence to support its efficacy, and the high rates of polypharmacy do not reflect the consensus of many researchers and physicians that the use psychotropic medications for children, especially in combination, should be a treatment course of last resort (Brenner 2014; Comer et al. 2010; Crimson 2007). In tandem with the increase in polypharmacy is an increase in the practice of off-labeling.

Off-labeling is the “prescription of medications without U.S FDA (Food and Drug Administration) approval for the condition or population to whom they are being prescribed” (Kearns and Hawley 2014, 438). Much like polypharmacy, off-label prescribing is not inherently evidence of poor practice. Most psychotropic medications have not been approved for use in children by the FDA, which forces physicians to prescribe drugs to children without FDA approval (Brenner 2014; Comer et al. 2010; Kearns and Hawley 2014). However, off-labeling can pose a threat to the health of children when not used appropriately, and its prevalence amongst children is rising (Brenner 2014, Comer et al., 2007). In the study conducted by Kearns and Hawley (2014) described above, 55.1% of patients seen by 1000 child psychiatrists between 2007 and 2008 were prescribed a medication off label (Kearns and Hawley 2014). There is little research to support off-label practices, and even less research showing the long-term effects for children (Brenner 2014; Comer et al. 2010; Crimson 2007).

The inappropriate use of polypharmacy and off-label prescribing of psychotropic medications can have devastating effects on children over time. Though few studies have been done on the long-term side effects, those that have been done recorded inappropriate behaviors related to the practice from both prescribers and patients. These behaviors included the over-under-use of medications, contraindicated prescribing of medications together, medication errors, non-compliance, off-labeling, therapeutic duplication, prescribing decisions based on educated guesses rather than scientific evidence, and difficulty assessing new symptoms (side effects of medications versus underlying disease) (Kukreja et al, 2013, 88). They also observed unwanted

outcomes for patients including adverse reactions to drugs, harmful drug-to-drug interactions, cumulative toxicity, compounded effects, and increased morbidity and mortality (Kukreja et al, 2013, 88).

Psychotropic Medications and Children in Colorado

The high rates of off-labeling and polypharmacy for psychotropic medications amongst children has received attention from state health departments and other concerned stakeholders. Colorado issued its own report in 2013, publishing data collected between 2008 and 2011 on the 414,880 children and adolescents enrolled in Colorado's State Medicaid program, which represents 40% of children in Colorado (KFF Henry J. Kaiser Family Foundation 2017). It found that 20,040 (4.8%) of these children were taking a psychotropic medication and that 2,615 (13%) were taking more than one (Colorado Department of Health Care Policy and Financing and Colorado Department of Human Services 2013). The same study compared findings from Colorado with those found in Maine, Missouri, New Hampshire, New York, Oklahoma, Pennsylvania, and Tennessee. Averaging the data found in all eight states (including Colorado) showed that 6.9% of children on Medicaid were taking an antipsychotic, while 25% were taking another mental health drug (Colorado Department of Health Care Policy and Financing and Colorado Department of Human Services 2013). This was compared to rates within Colorado where 5.6% of Medicaid children were taking an antipsychotic, and 17.4% were taking a mental health drug. Though both statistics place Colorado at relatively lower rates compared to the seven other states, their rates of

off-labeling and polypharmacy are relatively high. Of the 5.6% of Colorado children on Medicaid taking an antipsychotic, 3.4% were at or above the maximum dosage level (off-labeling), and 21.6% were prescribed multiple antipsychotics simultaneously (polypharmacy) (Colorado Department of Health Care Policy and Financing and Colorado Department of Human Services 2013). These data show that though Colorado's prescription rates are comparatively low, they are not immune to the high rates of off-labeling and polypharmacy seen across the country.

Prescribing Guidelines in Colorado

The 2013 report outlines Colorado's guidelines for prescribing psychotropic medications to children: 1) prior authorization is needed for any atypical antipsychotic for children under the age of five, which must be manually reviewed by a clinical health professional at the Department of Health Care Policy and Financing 2) Physicians are limited to the use of FDA approved indications only 3) physicians are encouraged to use the algorithm created by Colorado policymakers to help make prescribing decisions for children and psychotropic medications (Colorado Department of Health Care Policy and Financing and Colorado Department of Human Services 2013). These guidelines are not mandatory however, which leaves room for interpretation and noncompliance, which was observed during a follow-up report in 2016. This second review was conducted by the original reviewing department (Colorado Department of Health Care Policy and Financing) and partnered with Public Consulting Group (PCG) to evaluate the level of adherence from behavioral health organizations to the guidelines provided by the state

in the previous report. The major finding of this review was that adherence to, and comprehension of, the guidelines were low across all levels of the healthcare field (Colorado Department of Health Care Policy and Financing 2016).

The guidelines suggest using the federal definition of ‘medical necessity’ when evaluating whether a child qualifies for the prescription of a psychotropic medication. The report found that behavioral health organizations were not considering this guideline when prescribing and were instead using their own definitions. Many were unaware that the guideline existed at all (Colorado Department of Health Care Policy and Financing 2016). Interviewees (physicians and non-physicians) also stated that there were too many changes and policies in Colorado for staff to successfully implement, and that these top-down demands for bureaucratic procedures were not effective at the ground level. Interviewees reported feeling confused regarding priorities in healthcare practices, and that they were constantly “trying to explain how [policy]changes fit into an overall strategy” (Colorado Department of Health Care Policy and Financing 2016, 20). The report concluded that the demands to integrate these policies created barriers for staff who are working directly with children and families, which was further compounded by a lack of adequate providers with experience in treating children and families in Colorado. In summation, the report states that one of the biggest weaknesses regarding Colorado’s health provisions for children through Medicaid is that “behavioral health systems [are] not responsive to the needs of children and adolescents...” (Colorado Department of Health Care Policy and Financing 2016, 28).

Chapter 2: Theory

Theoretical Approach

I am using theories of Medical Anthropology to frame and analyze my research. Medical Anthropology examines human health and disease, systems of care, and contemporary adaptations to biomedicine (McElroy 1996). It acknowledges that health and health systems exist within larger contexts and are influenced and experienced through relationships and interactions with people, medications, and institutions (Lock and Scheper-Hughes 1996). A limitation of classical medical anthropology is the assertion that empirical research can lead to the discovery of pre-existing truths regarding the objects, or people, under study. It posits health and healing as something that can be known and explained through science and technological mastery, and that such pursuits will bring all healthcare closer to the biomedical model (Lock and Scheper-Hughes 1996). Critical Medical Anthropology (CMA) takes a more reflexive approach to these topics and is my primary lens of focus throughout the project.

Critical Medical Anthropology (CMA)

CMA acknowledges that the dominant ideas in health and healthcare are situated in their own social, historical, and political contexts. This requires the application of a critical gaze upon these modes of knowledge production, in order to increase what is “seeable, knowable, and speakable among physicians” (Singer and Baer 1995, 59). Singer and Baer (1995) propose four levels from which to analyze healthcare and these structures of knowledge: 1) the individual level which includes patients’ personal networks and experiences with illness, 2) the micro-social level, which involves physicians’ relationships with other care providers and with their patients, 3) the intermediate social level which analyzes health policies and decision making, and 4) and the macro-social level which examines the political and economic context in which health and healthcare exists (Singer and Baer 1995, 63).

These levels of analysis are only constructive however if a critical gaze is maintained to acknowledge and examine the supremacy of biomedicine in health and health care. Thus far, anthropologists have not examined the predominance of biomedicine with enough scrutiny because of its reputation as being “scientific,” and therefore “privileged and exempt from such analysis” (Lock and Scheper-Hughes 1996, 43). This lack of cultural analysis has led to the assumption that biomedicine is objective, universal, and treats a “historical subject” which the critical-interpretive perspective challenges (Lock and Scheper-Hughes 1996, 43). While CMA allows us to better understand the context within which biomedicine exists, a critical-interpretive approach allows us to examine the unique phenomenology of practicing professionals.

Understanding the experiences of the professionals I interviewed as they exist within this larger political and economic context allows their practices, as well as biomedicine, to be simultaneously explored and analyzed as structures made up of a “negotiation of meanings” and influence (Lock and Scheper-Hughes 1996).

Conceptual Frame Work

The Anthropology of Expertise

Expertise is a way to simultaneously examine institutions, professions, and knowledge production. Within healthcare systems, none of these factors can be examined in isolation as each inform and contextualize the other. The anthropology of expertise explores how knowledge is acquired through institutions, how professional boundaries are distinguished through this acquired knowledge and through the relationships this knowledge allows people to have with socially valued objects (Carr 2010). With the shift towards biomedicine, psychiatrists were able to reclaim their foothold in the mental health market due to their isolated knowledge on, and ability to prescribe psychotropic medications (Brodwin 2013). With an increasing deficit of child psychiatrists and an increasing need for pediatric services, this expert knowledge is beginning to be distributed between professionals, blurring these carefully constructed boundaries. The anthropology of expertise shows the reciprocal relationships that exist between the professionals I interviewed, knowledge production and consumption in the mental health field, other professional roles, and the reification of biomedicine and psychotropic medications through practice.

Barriers to Care

Drs. Levesque, Harris, and Russell (2013) created a conceptual model to address issues of access within health care. Their model has five components: Approachability; Acceptability; Availability and accommodation; Affordability; Appropriateness (Levesque, Harris, and Russell 2013). Each component is a way of addressing and organizing barriers to healthcare including and extending past physical access. While several models of access exist, this model pays attention to the unique experiences of supply side (caregivers) and demand side (patient) factors (Levesque, Harris, and Russell 2013). This model is helpful when looking at the practical concerns of providing mental health care to children that were identified by the professionals I interviewed such as cost, resources, evidence, and professional availability.

Biomedicine in Context

The medical system within the United States is inextricably tied to its political and economic context. The structure and organization of these powerful institutions (state bureaucracies, welfare programs, insurance companies, research institutions, etc.) directly impact health policies and the way illness is conceptualized and treated (Petryna, Lakoff, and Kleinman 2006). Exploring biomedicine within its context reveals the interconnectedness of these factors and how they impact decision making regarding the creation, promotion, and utilization of pharmaceuticals. Biomedicine is often examined in isolation and acknowledging the context in which it exists allows for a

richer and more critical investigation of its influence in the field of mental health. Considering biomedicine *within* context and *as* context for the experiences of the professionals I interviewed reveals and complicates factors of influence that impact prescribing practices.

Chapter 3: Methods

Research Objective

My research objective was to understand mental health professionals' experiences regarding the prescription of psychotropic medications to children and the larger context within which those experiences exist. I wanted to better understand what factors influenced prescribing practices for the professionals I spoke with as well as how these factors relate to one another within the context of biomedicine. I was interested in data that explained prescribing practices as resulting from factors other than a discrete medical diagnosis, including practical factors such as cost and access as well as ideological factors such as models of care and institutional pressures (a full list of the factors that were identified is provided on page 22).

Research Design

This project is rooted in an empiricist epistemological approach (Bernard 2011). Within this approach I used inductive reasoning which is an essential component of Critical Medical Anthropology's (CMA) analytic framework. A pillar of CMA is the examination of presupposed knowledge and structures, such as the supremacy of

biomedicine in healthcare (Singer and Baer 1995). I used a qualitative approach in both data collection and analysis as I am representing the experiences of mental health professionals in context in as broad and inclusive a manner as possible.

My interviews consisted of one adult psychiatrist, two child and adolescent psychiatrists, two child psychologists, two licensed clinical social workers, and one member of Colorado's Pharmacy and Quality Health Improvement Unit. I interviewed two professionals from each of the major categories (psychiatrists, psychologists, and master's level professionals) in order to examine similarities and differences in their experiences both within and between professions. The adult psychiatrist was selected to provide an "outsider" yet still professionally informed opinion, and the pharmaceutical board member was interviewed to gather information regarding Colorado's policies for these medications.

Population and Sample

The population of this study is all mental health professionals in Colorado. Each state has different guidelines regarding the prescription of psychotropic medications for children and it was therefore important to stay within one state while collecting data. Mental health professionals working with children, especially psychiatrists, are a difficult population to access due to their limited availability and limited numbers. These access constraints are even more pronounced in less populated cities, so I chose to isolate my sample to the highly populated city of Denver. My sample was selected using the chain referral method, utilizing online research and connections provided by other informants (Bernard 2011, 147).

Because I am interested in understanding the process of prescribing psychotropic medications to children, I collected cultural data from experts who can comment on cultural norms as well as variations from those norms (Bernard 2011, 113). This necessitated the use of nonprobability sampling, as I needed to capture the experiences of specific representatives within my population in order to gain an in-depth understanding of their experiences (Bernard 2011, 143).

Data Collection

My interviews began in May of 2017 and ended in August of 2017. All eight semi-structured interviews were conducted in the workplaces of each informant at their convenience. My guiding question for each interview was: What is your experience with children and psychotropic medications? From this initial point, I allowed participants to guide the conversation and probed when certain topics seemed particularly relevant to my investigation. These topics included medications, off-labeling, polypharmacy, the role of insurance companies, disagreements between professionals, professional roles, anecdotes about particular cases, research, evidence, cost, professional/prescribing pressures, cultural shifts within psychology/psychiatry, national organizations, and policies.

Each participant received a copy of an Institutional Review Board (IRB) approved informed consent form and all participants except for one agreed to be audio-

recorded. The interview without audio recording (interview #2) allowed me to take notes and gave me permission to use direct quotes. All interviews were then transcribed verbatim and were used for coding and analysis.

Data Analysis

I used qualitative techniques to process and thematically analyze my data through the iterative process of reading interview transcripts and finding themes that communicated patterns found throughout the interviews. By reading and rereading the interview transcripts, concepts that stood out as significant to my topic were highlighted, and later grouped into larger patterns due to similarity of content. The concepts identified as significant were chosen because of the level of frequency in which they appeared across interviews as well as their consistency with the findings in the literature presented in the background of this thesis. This technique allowed me to discover three overarching patterns in the data: relationships/identity, resources, and political/economic structures. The results of this this thesis are organized according to these overarching patterns.

Research Ethics

I received approval for my study from the IRB at the University of Denver on May 16th 2017. All informants received a copy of the IRB approved consent form and

participants received no compensation. The personal information of informants, with the exception of their professional title, was excluded from this thesis and the identity of each informant has been protected.

Chapter 4: Results

There is disagreement within the mental health field over the roles of different professionals (Kleinman 1988). These historic and contemporary disagreements find their roots in fundamental ideological differences over what mental health/illness is, how it is caused, and how it can be treated (Whitaker and Cosgrove 2015). These disagreements are complicated by concerns over financial, social, political, industrial, and personal pressures that both explicitly and implicitly influence the field and the practices within it.

The three categories of mental health professionals utilized for this research are psychiatrists, psychologists, and professionals with a master's degree in social work. Primary care physicians and pediatricians are also discussed throughout these interviews as they are becoming more involved in the prescribing of psychotropic medications to children. The scope and focus of each of these professional categories has changed dramatically over the past three decades, and these changes have been met with confusion and occasionally animosity from others within the field. Every interviewee I spoke with mentioned these role concerns, but depending on their professional positionality, their opinions ranged widely and helped affirm the proposition that these role changes are factors that have influenced the prescribing practices of mental health professionals.

Roles and Relationships

A child psychologist I spoke to discussed when he first began to see professional roles changing in mental health:

What I do think is true is that since...the 1980s people with master's degrees and doctoral degrees in psychology have been practicing what psychiatrists used to do. So psychiatrists have had to figure out, what is it that WE do? And what we do as psychiatrists is prescribe medication. So the whole field has become more medical. And less psychological because psychiatrists...keep getting backed into a drug...into a medicine corner. (Interview #3-child psychologist)

The 1980s were a time of substantial change in the mental health field. The Diagnostic Statistical Manual (DSM)-III was published which redirected diagnoses and treatment away from psychoanalytic thought and towards a biomedical model of practice (Kleinman 1988). Before the 1980s, psychiatrists provided therapeutic services as well as medications, but the desire to make the field more “medical” led to professional role changes (Buchanan 2003). The child psychologist quoted above identified this institutional shift and how this process simultaneously led psychiatrists to affiliate more with their prescribing practices as psychologists and therapists began practicing more therapeutic services.

While the above quote was provided by a psychologist giving his opinion on how institutional shifts have influenced the practice of psychiatrists, a child psychiatrist I spoke to shared his thoughts on how the practices of all mental health professionals have been influenced by a “payer environment”:

This payer environment sort of pushes prescriptions. So...there has been this sort of alphabet soup in mental health, where all these different people are taking different aspects of mental health...the payer environment has pushed providers towards practicing in very narrow ways. So as a psychiatrist you have an MD, maybe you have a couple hundred thousand dollars in debt, and the only way you're going to get paid is to see kids on 15 or 30-minute intervals, and the only way you can reimburse at a higher rate is to throw a prescription in there. That's a lot of pressure...And if you're a psychologist you can't get paid for prescribing! And it's not worth your time to do therapy because there are bunch of therapists out there who need the clients to fill their hours, so you get pushed to doing just assessments, so that's sort of what's happening to psychologists. (Interview 6- child psychiatrist)

This psychiatrist identified a financial factor that he believes is narrowing professional scopes of practice. As insurance companies began paying for mental health services as third party payers, the need arose for those services to be coded and billed. According to this child psychiatrist, the financial incentive to be reimbursed led to professionals

becoming specialized in a single aspect of mental health care in order to monopolize and optimize the billable market for that service: master's level professionals are being reimbursed for therapy, psychologists for assessments, and psychiatrists for prescriptions.

The same child psychiatrist quoted above elaborates, saying that the division of professional roles has caused complications in how patients access care. The public may not be aware of the differences between professionals and their limited scopes of practice:

So [professionals] are going to be in their own world view of how mental health should be treated. And you're going to be...locked into that world view. And patients don't know. It's sort of alphabet soup...I am telling you because who you see will determine whether or not you get drugs. And you don't only not get drugs, but you are locked into whatever their model of mental illness is. (Interview 6- child psychiatrist)

The above comment was made while discussing how patients get connected with services. The child psychiatrist was telling me that one's professional role is usually indicative of their view of mental health and how it should be treated. Therefore, who a patient sees will dictate how their mental health status is communicated to them (what it is, how it was caused, and how to treat/care for it). It will also determine whether or not that patient receives medication. And according to this child psychiatrist, the professional

a patient gets connected with for care is often random (as he says, it's "*alphabet soup*"). The interviewee goes on to give an example of what this might look like in the medical field:

Child Psychiatrist: So, if you went to the emergency room with chest pain, you would probably feel very uncertain and insecure if your care were then just by happenstance given to somebody with very different training than a physician. So you might get a cardiologist, or you might get somebody who went for two years to get a master's degree in heart physiology, or you might get some sort of tech, or a Chinese acupuncturist...If you have a mental health complaint in today's society you might get a therapist as your first point of contact and that therapist might be a social worker, they might be a child and family therapist, they might be a drug and alcohol counselor. You might get a psychologist who has very different training from a therapist. You might get a neuropsychologist. Or you might get a psychiatrist.

Me: and you find that inconsistency problematic?

Child psychiatrist: absolutely

This child psychiatrist sees the inconsistencies surrounding who provides care, and therefore what care is provided, as problematic. In the analogy he provides of the ER visit, he infers that an acupuncturist is an inappropriate care provider for an emergency

room cardiac patient. This analogy was intended to show that some mental health professionals are inappropriate care providers for certain mental health patients. Though his explicit intent was to illustrate what he sees as problematic inconsistencies of care, there is also a comment being made about his world view. The comparison of a mentally ill patient with a cardiac patient reveals his close affiliation as a psychiatrist with biological models of health which differs greatly from that of others within the field.

Different types of caregivers have begun practicing so narrowly and have such defined and often opposing ideas about mental health pathology that a patient's care and treatment will be completely different depending on who they see (Buchanan 2003). According to the psychiatrist above, the narrowing of scopes within professional roles limits patients' ability to experience a variety of care options and instead "locks" them in to whatever "world view" their caregiver (assigned at random) happens to have. An adult psychiatrist I spoke with endorsed that she, too, has seen the role of psychiatrists continue to shift towards medicine and away from other forms of therapeutic services:

The adult psychiatrist I spoke with discussed a shift she has seen in the medical community, beginning a decade ago and continuing today. She categorized physicians (including psychiatrists) educated during this time as "classically trained" and explained that these classically trained physicians were not being trained to endorse alternative treatments to medicine. She said that they are no longer receiving education on life

style considerations (nutrition, exercise, substance use, etc.) and that she does not think these physicians are taking that information into consideration before prescribing a medication. She attributes this change to a focus on “evidence-based medicine.” In her experience, both psychiatrist and primary care physicians are not collecting adequate patient information/histories before prescribing psychotropic medications. (Field note from (Interview #2 fieldnote-adult psychiatrist)

The adult psychiatrist I spoke to above describes how the education system for physicians and psychiatrists has come to reflect the same narrow focus seen in practice across the field. She views the current education of psychiatrists as being focused on evidence-based medicine to the detriment of other life-style related factors regarding health. According to my interviewees, psychiatrists are not only being backed into a “medicine corner” due to institutional pressures and professional role changes, but through their education as well. A child psychologist went as far as to describe psychiatrists’ relationships with these medical treatments as addictive:

I was just telling some students yesterday, Xanax is addictive...but who becomes addicted to it is the doctor not the patient. The doctor gives the Xanax, and it doesn't work so they give more of it, and then they give more! (Interview #3-child psychologist)

This child psychologist was discussing with me one of the biggest issues he sees in child psychiatry: psychiatrists who become “*addicted*” to prescribing medical treatments. In the example he gives, he admonishes the protocol of prescribing a medication to a child, and if ineffective, simply increasing the dosage instead of considering other, non-medical, treatment options.

In another interview, a different child psychologist told me that “*everyone loves a depressed kid*” (Interview #4 – child psychologist). She was implying that everyone prefers a child who is void of difficult symptoms; a kid who is quiet, withdrawn, and lethargic is much easier to deal with than a child with positive symptomology such as aggression, hyperactivity, or self-harm. The process of raising the dosage of a drug like Xanax, mentioned above, eliminates unwanted symptoms by bringing patients closer and closer to catatonia, as common side effects include: fatigue, amnesia, slurred speech, disturbed coordination, and can be highly addictive (Ballenger et al. 1988; Klerman 1988; Tone 2009). This drug’s efficacy lies in its ability to mask symptoms by sedating patients (Ballenger et al. 1988).

Psychiatrists’ affiliation with these medications seems to be moving them farther away from understanding pathology and closer to basic symptom management (Kleinman 1988). This observation was affirmed by the child psychologist, quoted above, who provided this brief case study:

Child psychologist: So fast forward to what I do now...I am seeing a 5-year-old in treatment and he comes in one week and he is catatonic. And part of the

reason I am seeing him is because he's anxiety driven, very busy you know, and he is being cared for by his maternal grandmother while his mother serves time for neglecting him. She goes to her GP and he puts him on imipramine.

Me: do you remember what dose?

Child psychologist: All I remember...God's honest truth, is grandma saying, 'if one is good, two are better' and she brought in a stoned catatonic 5 year old. Everybody loves a depressed kid...And the worst thing is, we're not dealing with underlying pathology. We are treating symptoms. So this little boy who has anxiety disorder, needed a very involved caregiver, which his grandmother was too tired to provide...

This example introduces the perception held by this, and other psychologists that I interviewed, that these drugs are being prescribed to address symptom management at the neglect of addressing pathology. This psychologist believed that a more involved caregiver would have helped address the underlying causes of this child's anxiety, but he was instead prescribed a medication indicated for nerve pain and depression to treat his symptoms. The same child psychologist later said that:

In my opinion Ellie, it's just gotten to be a bad business, where shrinks sit in the office like you and I are and I say ok now you go home and you give your kid these five pills. I should see you a few times. We don't make assessments based on that. (Interview #4 – child psychologist)

Is if in rebuttal to this accusation of “armchair” psychiatry, a child psychiatrist told me that this negative perception has nothing to do with concerned psychologists, and has more to do with money:

Psychologists want prescribing privileges because that's another way to get money. And of course they will say that it's just a way for them to give holistic treatment. But remember, psychologists have zero medical training. Psychologists haven't taken a single class in physiology, never did a neuro exam. (Interview 6- child psychiatrist)

The role of psychiatrists in the mental health field has changed over the past several decades. According to my interviewees, these changes seem to have created professional divides, especially between psychologists and psychiatrists. One of the psychologists perceives psychiatrists as “*addicted*” to medical treatments, unconcerned with pathology, and blind to psychological and social factors affecting mental health. While one of the psychiatrists perceives psychologists and other professionals as improperly trained to handle patients with mental illness, and as money hungry opportunists, trying to wiggle their way into psychiatrists’ elite space of prescribing privileges. In contrast, this professional animosity did not appear in my interviews between psychiatrists and primary care physicians or pediatricians.

Collaboration

While the above quotes show professional and ideological divides between several professionals I interviewed, participants also discussed instances of professional collaboration. According to a licensed clinical social worker (LCSW) I spoke to, master's level professionals will often consult with a psychiatrist to update them on the progress a patient who has been prescribed a medication:

I always try to collaborate with the prescriber, so it feels like a joint team. So once referred I will update the prescriber on what I'm seeing emotionally, behaviorally... are they less anxious, and what are the benefits? Or, I'm not seeing anything and do we need to think about a different med or upping the dose, kind of having those conversations about what's working and what's not working (Interview #5 - LCSW)

This LCSW is describing a scenario where the psychiatrist is responsible for prescribing a medication and she, as the LCSW, is responsible for monitoring and reporting on the progress of the child. It is interesting to note here that if the medication prescribed is not working, the LCSW and psychiatrist discuss “*a different med or upping the dose*” and not non-pharmacological interventions.

The collaborative relationship described above is consistent with the ideal model of care described by a child psychologist I spoke with who said:

I mean the ideal setting is a doctor that has a working relationship with the other people trying to help the kid. So that they don't have to see the kid that often because they have people they are collaborating with. To give them feedback and report (Interview #3 - child psychologist)

This model describes a psychiatrist with limited time, and a care team designed to support the psychiatrist by giving feedback and reports on the progress of their mutual patient. These two quotes however are the only two that discuss collaborative efforts between mental health professionals throughout my interviews. The rest of the conversations revolved around collaboration between psychiatrists and primary care physicians and pediatricians.

Due to the deficit of child psychiatrists in the United States, and a mounting need for pediatric services, primary care physicians and pediatricians are now becoming a prominent part of this biomedical mental health care team (Smith 2012). The pharmaceutical board member I spoke to explained that an effort had been made within Colorado to help primary care physicians prescribe these psychotropic medications to children:

For a while in Colorado we had this thing called C-PACK [Colorado Psychiatric Access and Consultation for Kids], and it was funded by the health foundation, and they had a bit more of an intensive intervention around helping prescribers figure things out, and they also did a pretty

intensive educational program over time for pediatricians and family docs. And one of the things they found was that for the most part, people taking the class thought they couldn't stop these medications. And some of them didn't feel like they knew how to do that or have that conversation. (Interview #7 Pharmaceutical Board Member)

This educational program revealed that though primary care physicians and pediatricians in Colorado were often prescribing or monitoring pediatric patients taking psychotropic medication, they often did not feel equipped to do so. This knowledge has led to an emphasis on creating connective services that allow primary care physicians and pediatricians to consult with psychiatrists when prescribing these medications. A child psychiatrist told me:

I am starting to do some telehealth work in the emergency room. I actually interface quite often, at least on a daily basis, with my colleagues in other specialties in medicine...constantly interfacing with the pediatric emergency medicine doctors and then we also field calls from the community to pediatricians...so pediatrics in the community, outpatient pediatricians, children's hospital, they can call for consultation, really around anything you know...[pediatricians] could call and ask about medication, if they had a question about how to dose something or a side effect, or if they needed some assistance navigating

the system and how to get kids and families connected to treatment, we could help link them with resources. I think that the overarching goal of a child psychiatrist is to practice at the top of my license meaning that I will provide consultation to primary care providers around fairly simple and straight forward cases, so if they have questions around how to dose a stimulant, or what the specific side effects for anti-depressants that we need to look out for, and then I can give them consultation you know kind of continue to follow along with them as long as they feel comfortable prescribing the medication (Interview - 1 child psychiatrist)

Telehealth, an increasingly popular advancement in health care, allows physicians to consult with one another and with patients over the phone or video chat without having to meet in person. In this example, telehealth is a tool pediatricians and primary care physicians can use to consult with psychiatrists when prescribing psychotropic medications to children. Through this process, psychiatrists are beginning to share their expert knowledge with other professionals. According to my interviews, this type of collaboration is occurring between psychiatrists and other physicians but does not appear to be as common between psychiatrists and other mental health professionals.

Resources and Access

It has become clear through these interviews that prescribing psychotropic medications is the job of psychiatrists and more recently, of pediatricians and primary

care physicians. It is important to understand what factors affect access to these prescribers, and what resources are or are not utilized within a biomedical model of mental health care. Access factors include physical and geographical barriers to physicians, affordability on both the supply (physician) and demand (patient) side, and the adequacy of the care provided. The physical barriers that limit access to physicians are usually the result of the workforce deficits identified by several interviewees.

Access

The limited number of child psychiatrists nationally, and in the state of Colorado, has made accessing prescribers a difficult task (MHA 2015). As previously discussed, a decreasing workforce, long wait times, and high costs make psychiatrists some of the most difficult mental health professionals to access, and a child psychiatrist I spoke to addressed what this limited access means for mental health within the community:

I just think that there is trouble with access, not only with child psychiatrists, but with other mental health services as well. I think it's hard to access providers just because there aren't enough of us to sort of meet the need....Child psychiatry has a very significant workforce issue...it's an underserved population, children and adolescents with psychiatric illness. (Interview #1- child psychiatrist)

This interviewee mentions that access to many mental health services are limited, but the focus seems to be specifically on child psychiatrists' inability to meet the needs of underserved pediatric patients. Other than the above quote, no other interviewee mentioned any mental health services other than psychiatry as being difficult to access. The conversations more commonly revolved around issues of access to prescribers. The same child psychiatrist explains the repercussions of this disconnect between psychiatric supply and patient demand:

And because of the delay, as you might imagine, it can take up to two years to get these kids in to be seen. They're growing, they are getting bigger, and aggression is a very common symptom for kids that don't have the ability to speak or to communicate verbally. They act out behaviorally and these are often times the kids that end up with off-label prescribing, on high doses of medication, and multiple medications, because they are so unsafe, that their aggression is leading to property destruction, leading to assault on peers, teachers, family, self-injury, and that is really a significant problem, so it's really in the interest of safety that these kids are on these medications and I think providers are doing the best they know to do in a difficult situation. (Interview #1 – child psychiatrist)

According to this psychiatrist, a lack of physical access to prescribers is a barrier for many children in need of mental health care. And though collaboration with pediatricians and primary care physicians presumably alleviates some of these prescription related access constraints, it is still seen as a significant issue. According to this psychiatrist, while children and their families wait for care, symptoms often worsen, especially as children develop physically. She describes a prescribing pressure caused by long wait times that result in medications becoming the only available resource to ensure that child and others' safety. There was no discussion of what services are or could be used supplementary until a child accesses a prescriber. In fact, though many of the interviewees identified access as a significant issue for children with mental health needs, they often did not discuss the issue beyond initially identifying it as problematic. As one child psychiatrist said plainly:

... the problem is freaking access! (Interview #6 – child psychiatrist)

According to several of my interviewees, physically accessing prescribers is a difficult task for children and families. And a national workforce shortage of psychiatrists coupled with a growing need of services for young patients is leading to long wait times (Steinman et al. 2015). According to the child psychiatrist I spoke to, during these wait times children often go without any care at all, leading to a worsening of symptoms and often making medications the only viable option for rapid symptom relief. This discussion of access however, with its focus on psychiatrists and inevitably on

psychotropic medications, limits the recognition and utilization of non-biomedical resources for providing legitimate treatment and care for children.

Cost

Another factor influencing prescribing practices and access to care is cost. Within the mental health care system, there are two questions regarding cost: what are patients covered for and how much are professionals being reimbursed? Insurance companies are able to define their own criteria for “medical necessity” and therefore can decide which services are covered for which clients: medications, psychotherapy, emergency room visits, or inpatient facilities (APA 2018). A child psychiatrist discussed with me her experiences with these issues of cost, coverage, and affordability:

And the other sort of challenge we run up against is you know what insurance companies and payers are willing to pay for, and so often times I think not because you're wanting to...but because you're wanting to help the child and family, is that sort of doing the best with what you have, meaning you can't access a therapist, you can't access in home therapy, you can't access family therapy, the child doesn't really meet the DSM criteria for depression but certainly has a lot of irritability and acting out behaviors, and so you sort of do the best with what you have, and sometime all you have is the possibility of a medication, maybe making an impact, in that particular situation to sort of help the child move forward (Interview #1 – child psychiatrist)

Even if this psychiatrist felt that therapy would be a more appropriate route of treatment, because insurance companies cover medications more than therapeutic services she is forced to practice within those financial constraints. If the choice for an insurance-covered treatment is medication or nothing, this interviewee recognizes that medication may be the only possibility for improving a child's symptoms. Of note here is that in this case, the prescription of a medication is not the direct result of a diagnosis, but instead a result of institutional pressures and a desire to alleviate symptoms. After explaining this to me, the same child psychiatrist provided me with an anecdote to illustrate her point:

We were seeing over 3,000 kids a year [in the emergency room], psychiatric patients, and these are kids in crisis and they come because they don't have anywhere else to go and they are truly in crisis. So then having to fight with insurance companies about not only getting medications authorized, but even getting treatment authorized. Just as an example, I had a young patient who was in the foster care system and he was brought to the emergency room in crisis. He was found with a weapon and wanted to use it to kill his foster parents and kill himself, and he was having psychotic symptoms telling him to do these things, and the insurance company didn't want to pay for hospitalization...It is much cheaper to pay for a couple of prescriptions for a child than it is to pay for a hospitalization (Interview #1 – child psychiatrist)

This psychiatrist believes that because the initial cost of hospitalization is much higher than that of a prescription medication, insurance companies are pushing these prescriptions in the face of overwhelming evidence that another course of treatment would be more appropriate. In this example, it appears that care is being dictated by what services are covered and not by what services are most appropriate.

A child psychologist I spoke with discussed the constraints of cost and coverage more broadly, inferring that many pediatric mental health issues would be lessened if institutions invested in pre-emptive care instead of retroactively paying for illnesses that may have been prevented:

Me: so that's what's lacking? Preemptive care?

Child psychologist: Yes. That's it. That is absolutely it

Me: and why don't we do that?

Child psychologist: because it's expensive. People always say...and that's the only thing I've ever heard, prevention is so expensive. But it's so much easier to build health than rebuild pathology. (Interview #4 - child psychologist)

Preventing mental illness in the first place is better for patients than treating a mental illness that has already manifested. But, according to this child psychologist, that is expensive. And according to the child psychiatrist above, insurance companies are making choices that are initially cheaper yet are less cost effective long term, regardless

of what is in the best interest of the patient. Insurance companies that cover prescription medications over other forms of mental health care are incentivizing patients to become life-long customers, taking medications for chronic conditions that never permanently alleviate symptoms (Whitaker and Cosgrove 2015).

This pressure from insurance companies to pursue prescription treatments over all others also affects the prescribing practices of physicians as it directly influences their paychecks (Cummings 2015). This financial pressure was brought up during an interview with a child psychiatrist:

Me: so you think that there is a potential that some of the discrepancies between how people are practicing is because of how they are being reimbursed by insurance companies?

Child psychiatrist: yes. There is a lot of economic pressures pushing people into particular practice styles. (Interview #6 - child psychiatrist)

The same child psychiatrist as above deconstructs how this pressure effects daily practice:

So as a psychiatrist you have an MD, maybe you have a couple hundred thousand dollars in debt, and the only way you're going to get paid is to see kids on 15 or 30 minute intervals, and the only way you can

reimburse at a higher rate is to throw a prescription in there. That's a lot of pressure. (Interview # 6 – child psychiatrist)

According to this psychiatrist, psychiatrists have a financial incentive to prescribe psychotropic medications. And the more children they see in a day, and the more medications they prescribe, the higher their financial reward. This is not to say that all psychiatrists practice with this mentality, but it is important to acknowledge financial pressure as a significant component in the relationship between cost and practice. Issues of cost influence both the supply and demand side of mental health care.

Evidence

From these interviews, another major factor that was identified as hindering adequacy of care is the lack of research and evidence available regarding children and the use of psychotropic medications. These medications are part of the biomedical model which implies that their use must be supported by evidence-based medicine (Guyatt et al. 2002). Without evidence, prescribing practices cannot reflect this biomedical mandate. Several interviewees discussed a lack of overall research regarding children and these medications, a lack of knowledge regarding their long-term effects, pharmaceutical companies' influences on study results, and a lack of approved pediatric medications by the FDA. A child psychiatrist explained to me that these issues are not the result of one major influencer, but rather a combination of multiple factors that result in psychiatrists prescribing in complicated and difficult circumstances:

There's not like this evil psychiatrist out there listening to pharmaceutical companies (gives an evil laugh "mwahaha") no, there is this profoundly disruptive kid that's come to them, that's fairly impaired, doesn't know what to do, there's no evidence out there (Interview #6 – child psychiatrist)

This child psychiatrist is addressing the difficulties of prescribing a psychotropic medication when there is little evidence to support that practice for children. Ethical and safety concerns limit the number of studies conducted on children, which means that few psychotropic medications are approved for pediatric use by the FDA (AACAP 2012). A LCSW I spoke to said that the limited number of FDA approved drugs reflects a lack of understanding of their efficacy among children:

As you know there are still just a couple of meds that are FDA approved for kids, which says we are still trying to learn a whole lot more about what really helps (Interview #4 - child psychologist)

This comment implies that a measure of conservatism is being applied to the approval of these drugs because not enough is known about 'what really helps'. While this is often the case, many psychotropic medications are discovered accidentally and are prescribed without a fundamental understanding of their efficacy (Whitaker and Cosgrove 2015). This means that a medication can be marketed as an effective

treatment even if the pathology of the illness and the medication itself remains unknown. A child psychiatrist explains that:

We don't know how [these medications] they work. We don't know how lithium works. We don't really know how the SSRIs work, we don't really know how stimulants work. I mean we know a lot about the molecular pathways, the synaptic pathways, the parts of the brain that seem to recover with their use. But we don't know why the depression goes away. And clinically it's not that the depression goes away. Clinically people are less stressed and less reactive to SSRIs and then that helps ease anxiety and depression. But we are in the dark ages, remember? We don't even know the fundamental mechanisms of the disorders... If you don't know the physiology, then how the heck are you supposed to know how they work? (interview #6 – child psychiatrist)

Lithium, Selective Serotonin Reuptake Inhibitors (SSRIs), and stimulants are used for symptom reduction in bipolar disorder, depression/anxiety, and attention deficit disorder, respectively. Yet what exactly makes these drugs effective remains unknown, as do the mechanisms of the disorders themselves (Kleinman 1988). The ambiguity of these medications means that they are often prescribed off-label to treat disorders other than what the FDA has indicated them for (Brenner 2014). The lack of approved medications for children by the FDA has been correlated with off-label prescribing

practices. These off-label practices are not formally endorsed by most states but are common across pediatrics, according to my interviewees.

The pharmaceutical board member I spoke to said that instead of pushing for more research into illness pathology to understand what medications might be more effective and why, the issue of off-labeling has simply increased pressure on the FDA to approve more drugs. The pharmaceutical board member said:

Lately the FDA has had a lot of pressure to increase approval of drugs and so sometime studies are...based on limited data or based on sort of shorter term things. (Interview #7 – pharmaceutical board member)

From her perspective, the pressure for more psychotropic medications to be approved for pediatric patients has led to studies with questionable data being used to justify FDA approval. These studies create confusion in the field and make it difficult for prescribers to parse out accurate findings to best inform their prescribing practices. As a child psychiatrist told me:

For every one set of information or one study you find one that says the complete opposite. (Interview #1 – child psychiatrist)

Though this is hyperbole, it captures the exasperation felt by many of my interviewees. Studies and data on children and psychotropic drugs are limited, and those that do exist

are often controversial (Whitaker and Cosgrove 2015). A child psychologist I spoke with stated that while Xanax is indicated by the FDA as a treatment for panic disorders:

Xanax backfires on panic attacks within weeks. But people still prescribe it. Because some research says it helps with panic attacks. SSRIS seem to have no effect whatsoever except that it sometimes makes kids suicidal and yet they are still prescribed for kid (Interview #3 child psychologist)

The previous three quotes address concerns over how data is collected, interpreted, and presented. Physicians rely on the FDA and other organizations to read pharmaceutical studies and to create prescribing guidelines that accurately reflect the findings. Instead of reading the studies in full however, an interviewee I spoke to stated that many in the field rely on summaries written by the pharmaceutical companies themselves. The pharmaceutical board member I spoke with told me that:

Board Member: Our DUR (Drug Utilization Review Committee), meets and they are almost half pharmacists, half doctors and one industry rep which is sort of interesting

Me: Industry meaning pharmaceutical industry?

Board Member: yes and they are responsible for making recommendations about prior authorization...[so] these groups review

summaries and we can either accept, we usually accept, the recommendations of the DUR board

Me: and where do these reviews come from?

Board Member: we take whatever we can get.

Even those responsible for making prescription guidelines for the state of Colorado do not have adequate access to the full gamut of evidence needed to make fully informed decisions regarding the approval of these medications. They often read summaries, written by companies with the greatest financial investment in a drugs success, to inform their decisions.

Several interviewees described the lack of research as the primary barrier preventing them from prescribing psychotropic medications to children in a way that reflected evidence-based medicine. But a child psychologist I spoke with argued that in addition to this problem, the information that *does* exist is not being critically examined:

Well the weird thing is...that when you read the pharmaceutical study companies write up...everything is there that you need to know...[but] nobody in my field ever reads studies anymore. Everyone reads someone else's review. And those summaries of drug studies are written by people that work for the drug companies... So, like a good example is using Ritalin for ADHD...What the original research found was that for kids, carefully diagnosed with ADD, Ritalin shows enormous improvements,

starting really at week one and going through 14 months. Then, it starts to even up, and over the course of three years kids without Ritalin are doing as well or better, and then after six years, kids without Ritalin are doing a lot better than the kids with Ritalin, including being an inch taller.... The issue at hand is that when the study was published, it was published as a study that went on for 14 months that showed amazing results. And then it's only if you go to the actual material that they have to hand into the FDA that you find, oh! They also followed them for 6 years but never wrote that up...To me the major issue is the reviews are written by people with a stake in the review (Interview #3 – child psychologist)

There is clearly a lack of research and evidence to accurately inform the prescribing practices of psychotropic medications to children (Whitaker and Cosgrove 2015). And according to my interviewees, for the research that does exist, even those in charge of creating policies and prescription guidelines are only reading study summaries written by the pharmaceutical companies themselves. The psychologist quoted above believes that though the long-term data for studies is sometimes available, it is not sought after by prescribers and therefore is not used to inform their prescribing practices.

This issue of long-term effects is of great concern, as these drugs are being given to children who are still developing physically and neurologically. A child psychiatrist told me that:

I really do think there has to be a very compelling reason to recommend a medication to a child because we do not have as much information or research as we need to fully understand what these medications are doing to developing bodies and brains and that's part of what I tell families all the time, that there really has to be a compelling reason to expose your child to this medication and, that's really what our evidence based, best practice standard is (Interview #1 – child psychiatrist)

A LCSW showed a similar sentiment after I asked her if she had seen children in her practice who had been prescribed off-label psychotropic medications. She said she had, and that this practice was done:

With no comprehension that developing brains are vastly different than brains that have been properly developed (Interview #4 – child psychologist)

If the evidence and research being conducted on children and the use of psychotropic medications is as limited and controversial as is being reported here, then the prescribing practices of psychiatrists and non-psychiatric prescribers are not being adequately informed. Though their affiliation with the biomedical model of care requires them to practice evidence-based medicine, the lack of evidence makes this an

impossibility. There are aspects of mental health/illness and its affiliated treatments that do not fit within the biomedical framework into which they are being forced.

Mental Health within the Biomedical Model

The professionals interviewed for this project identified institutions such as insurance companies, professional organizations, and pharmaceutical companies all as influencing prescribing practices. These institutional pressures appear to be experienced and negotiated within the context of other influential factors such as access to care, research on psychotropic medications, and the roles and relationships of professionals within the field. From speaking with professionals, it appears that some of these influential power structures are difficult to identify or at least articulate. Several interviewees described the “system” in which they operated as being “damaged” or “broken”, but rarely connected this sentiment to the factors outlined in the previous results sections. A child psychiatrist I spoke with identified questionable prescribing practices as a symptom of this confusion and brokenness:

I think providers are doing the best they know to do in a difficult situation...what at times appears to be over or reckless prescribing or off labeling or what might seem inappropriate I think at times it certainly is, but at times it's just a symptom of people doing the best they can within a really broken system (Interview #1 – child psychiatrist)

She describes questionable prescribing practices as a symptom of psychiatrists having to negotiate care within a broken system. Yet she does not explicitly identify what is constraining treatment choices or connect this comment with ones she had previously made regarding research and cost. A LCSW I spoke with provided some more insight, claiming that the biomedical model is to blame:

So this is my concern, is that the way the system, the [bio]medical model is, when you get 15 minutes with their prescriber, that they get the same monitoring, follow up, time to adequately assess what's going on. It's 15 minutes. So in an ideal world, whether it's a PCP, PNP or a psychiatrist, that we get more time to see what's going on, what's going on with the family, you know? (Interview #5-LCSW)

A child psychiatrist previously discussed how financial concerns have led psychiatrists to spend less time with their patients. This LCSW also blames the biomedical model for these rapid psychiatric assessments and diagnoses and is expressing concern over the quality of care that can be accomplished in 15 minutes. The “system”, identified here as the biomedical model, is influencing the quality and quantity of interactions between caregivers and their patients.

In addition to efficiency, another key element of the biomedical model is organic explanations for health and illness (Wilson 1993). Within mental health, several biologically based explanations have been proposed, the most influential of which being

that of chemical imbalances (Whitaker and Cosgrove 2015). A child psychologist I spoke to referenced this theory as well as a larger ideological shift he sees regarding the United States and its emphasis on the brain:

A lot of medications just don't help but people think they do... it's this whole myth of chemicals. Chemical imbalance. I mean this idea that depression is a chemical imbalance. The whole country is fascinated with the brain. It's like the brain is everything and psychology and anthropology are nothing... so we have a medical view of the human condition right now which leads to intervention. (Interview #3-child psychologist)

This psychologist is commenting on a fundamental disagreement that still exists within the field of mental health; even after the herculean effort to move the field towards a biomedical model, we still do not agree on the causes of mental illness. This psychologist places proponents of the biomedical model on one side, viewing mental illness as derivative of biological or neurological disturbances, and psychologists and anthropologists on the other side, presumably considering psychological and social explanations for mental illness.

Theories such as the chemical imbalance theory eliminate the need to discuss psychological and social factors. If the cause of mental illness is neurological, then the appropriate treatment would be one that directly affects neurology. However, drugs are

not the only treatments that affect neurology. Non-pharmaceutical psychotherapeutic treatments are also effective ways to change the brain (Kleinman 1988):

The most target way to change the brain is to change experience...learning. That's the most targeted. The brain is built to do that.... the only thing that's a targeted intervention right now that we know of for the brain is learning. So that's definitely not meds but it's definitely biologically based (Interview #7 – child psychiatrist)

This quote shows the supremacy of biomedicine within the mental health field, and how much it influences prescribing factors. Even though treatments that focus on experience and learning accomplish the same result of altering neurology, without any of the potential side effects associated with psychotropic medications, psychiatrists are still prescribing medications over therapeutic treatments (Kleinman 1988).The same child psychiatrist proposes that broader societal pressures are also to blame for high prescription rates among children:

...a lot of kids are definitely medicated to behave within the social context that they're expected to operate in, so their symptoms are causing some kind of functional imperative. But that's a broader societal issue. (Interview #6 – child psychiatrist)

The implication of this comment is that instead of advocating to alter the environment of a child, prescribers are using medications to alter the child to better fit their environment. Though this psychiatrist has identified social factors that should be addressed when treating children with mental illness, they are not incorporated into his conception of the type of care he can provide. Whether he believes that “*broader societal issues*” should be dealt with by mental health professionals or not is unclear. What is clear, is that he has identified situations where children have been medicated in response to a social issue, and not a biological one. The biomedical model seems to be reducing the scope of what care providers think they should and can do for their pediatric patients. It is obstructing more holistic conversations that would address the interactions of broader societal and psychological issues in addition to biology.

A discussion I had during my final interview with a LCSW synthesized the previous themes of cost, resources, access, evidence, and biomedicine. This LCSW uses a technique called neurofeedback to treat her pediatric patients with ADD/ADHD. During this technique, patients can observe the frequency of their brain waves through either an audible or physical stimulation produced by the neurofeedback machine. They are encouraged to speak about issues surrounding their hyperactivity, anxiety, etc. and as they observe their brain waves increasing in response to their distress, they are encouraged to slow their brain waves down through breathing techniques and relaxation. When describing the technique to me, she explained that it has measurably better long-term outcomes than medications yet is often not covered by insurance

companies nor considered a primary option for families due to the extended time for treatment:

LCSW: you know, I would say, all the kids that can get access should be doing neurofeedback in my opinion

Me: could it be a replacement for meds?

LCSW: could be! You can use both...the differentiation I would make is meds are quicker. You know you'll probably see with ADD a change over night. Whereas this, you've got to come weekly it takes anywhere between 300 minutes (so about 10-15 sessions) depending on how quickly the client fatigues. Or up to a year. And the great thing with the neurofeedback is once you get the brain functioning optimally, you don't need it any more, you're done. Unless you get a head injury, or a fever actually disrupts brain waves, anesthesia, you want to coach people not to drink artificial sweeteners...

Me: so as far as efficacy goes, that's the real difference between neuro feedback and meds is time and expense?

LCSW: ya...and the duration. The neurofeedback is better because you know you've got a shot at alleviating it completely

This therapy is effective in the treatment of ADD/ADHD and when done to completion has long-term success (Niv 2013). The LCSW above told me that however that it is

rarely covered by insurance companies, it can take up to a year to see the full results, progress can often be slow, and it takes significant effort and focus from the patient and their caregivers. What it does do however, is address some of the root causes of disturbances such as trauma and anxiety, which medications cannot do. They cannot address the social and individual context in which the patient exists. Nor can they ensure long-term efficacy and safety for the child to whom it is being prescribed (Comer et al. 2010). The supremacy of medications as treatment options for children experiencing mental illness is complicated by factors of professional roles, cost, time, availability, insurance companies, and evidence. These factors need to be examined to ensure that children are receiving the most appropriate treatment for their emotional and behavioral disturbances.

Chapter 5: Discussion

Biomedicine, Pharmaceuticals, and Mental Health

Health and illness do not exist in isolation. Definitions and decisions regarding who is ill and how to treat them are inherently culturally biased and influenced by the broader societal context in which they exist (Singer and Baer 1995). For western culture, and increasingly for much of the world, biomedicine is a dominant feature of this societal context, and its supremacy is twofold. It, like any other dominant ideology that gains hegemonic success, is presented as beneficial to society and health at large, not just to those who capitalize from its propensity. Once this rhetoric is established, biomedicine retains supremacy by avoiding epistemological critiques. Biomedicine is exempt from such critical analysis because of its affiliation with “science,” and its reputation as a mode of truth-finding through empirical research. Yet using an interpretive approach to critical medical anthropology reveals that in fact biomedicine, like any other medical system, is esoteric, localized, symbolic, and “doggedly relativistic” (Lock and Scheper-Hughes 1996, 43). Once this is realized, biomedicine can be analyzed in the same way as any other dominant ideology, as existing within a nexus of factors that culminate into certain practices of health and healing. The pervasiveness of biomedicine is hugely influential in the practice of prescribing

psychotropic medications to children, but other micro and intermediate factors are also at play, complicating and often obscuring holistic conversation about mental health.

Pharmaceuticals are the physical embodiment of biomedicine, addressing organic pathology and chemically altering the brain, and their ubiquity in western culture has altered how we conceive of illness and care, especially in the field of mental health (Van der Geest, Whyte, and Hardon 1996). Recently however, research has begun speaking to power, dismantling the idea that pharmaceuticals are inherently appropriate and efficacious treatments, and questioning the placement of mental health within the biomedical model. Studies are being published showing that antidepressants are one third less effective in treating depression than are simple life changes, such as improving sleep patterns (Kirsch 2014), that though the rate of prescriptions have increased by 500% since the 1980s, there has been no national reduction in rates of nation-wide depression (Hari 2018), and that mental health is acknowledged by the WHO as being produced socially (Friedli 2009). We know that “trials are funded by pharmaceutical corporations and investment banks, who are motivated more by maximizing profit margins than by promoting health” (Hardon and Sanabria 2017, 120). And those in positions of power, such as Dr. Dainius Puras, a medical doctor and representative of the office of the United Nations High Commissioner for Human Rights (UN OHCHR), explain how past research on pharmaceuticals have been controlled by invested power structures, and that reductive neurobiological paradigms, such as the chemical imbalance theory, are problematic to health:

The biased and selective use of research outcomes has negatively influenced mental health policies and services. Important stakeholders, including the general public, rights holders using mental health services, policymakers, medical students, and medical doctors have been misinformed. The use of psychotropic medications as the first line treatment for depression and other conditions is, quite simply, unsupported by the evidence. The excessive use of medications and other biomedical interventions, based on a reductive neurobiological paradigm causes more harm than good, undermines the right to health, and must be abandoned. (Karter 2017)

Dr. Puras is criticizing the use of reductive, biology-centric paradigms when considering mental health interventions, the supremacy of biomedical treatments, and the negative influence of biased research used to inform prescribing practices. Several interviewees acknowledged these issues of reductionism, biomedical influence, and evidence during our conversations: A child psychiatrist said that children were being prescribed these medications to make them behave within their social contexts, a licensed clinical social worker described how the biomedical model pressured prescribers to capitalize on their patients by prescribing medications, a child psychologist talked about how disruptive the theory of chemical imbalances has been on the promotion of pharmaceuticals as a first line treatment, and several addressed concerns over the lack of reliable data. The use of psychotropic medications to treat mental illness in children remains in place despite significant research discrediting the appropriateness of this model for the specific population at hand (Whittington et al. 2004). The retention of this form of treatment may be better understood through an

exploration of additional factors within the pharmaceutical nexus, including the micro-level roles and relationships experienced by professionals (Petryna, Lakoff, and Kleinman 2006).

Biomedicine at the Micro-Level

Interviewees discussed the historical and contemporary role changes between different mental health professionals. Though psychiatrists used to be responsible for psychotherapeutic care as well prescribing psychotropic medications, over the years other professionals (psychologists, social workers, and therapists) began practicing therapy while psychiatrists simultaneously moved towards becoming experts in prescribing psychotropic medications (Buchanan 2003). The anthropology of expertise provides a framework with which to better understand these role changes. It considers “the participation of objects, producers, and consumers of knowledge”, recognizing that these interactive relationships are “inescapably ideological, implicated in the evolving hierarchies of value that legitimate particular ways of knowing as ‘expert’” (Carr 2010, 17).

Mental health has undergone several ideological [r]evolutions during the 19th and 20th centuries, each one creating and then discarding models with which to understand mental health: psychoanalytic theory with its focus on subconscious thoughts and memories was replaced by the theory of behaviorism which focused on behavior, relationships, and processes, then came humanism and cognitive psychology which focused on perception, beliefs, and now the contemporary biomedical school of thought with its focus on biology, physiology, and the mechanisms of the human body.

All these models are attempts at better understanding mental health by triangulating aspects of the human experience to identify patterns and processes that lead to mental health and illness. With the adoption of each new model, different ways of knowing and knowledge were validated. What was considered “expertise” changes in tandem with these ideological domains, and the same can be seen for biomedicine. Two differences with this most recent model however are that it does not include social or psychological factors, and it incorporates pharmaceuticals. These medications are socially valued objects that define psychiatrists as experts within the biomedical model because they cannot be prescribed or even understood without expert assistance and interpretation (Carr 2010). Psychiatrists, by nature of their medical training, have affiliated themselves with psychotropic medications and have the capability of interpreting them for other medical professionals, mental health professionals, and patients. This professional reliance on psychiatrists to prescribe and interpret psychotropic medications has cleaved a distinct role for psychiatry within mental health as well as established them as experts within the biomedical model. A current change in the supply and demand of care however has caused psychiatrists to share their expert knowledge outside of the field.

Mental health professionals are witnessing a national crisis amongst children. Due to the extended schooling and accompanying debt described in this project, psychiatrists are in limited supply, especially those who specialize in children (Williams 2015). Concurrently, there is an unprecedented rise in children and families seeking mental health services (Williams 2015). This inability of child psychiatrists to meet the overwhelming need of underserved mentally ill children was identified by several

interviewees. This deficit has created practice and policy changes that promote an increase in the availability of prescription treatments by utilizing non-psychiatric physicians. Tele-health, emergency room consultations, and educational programs were all described by interviewees as resources for primary care physicians and pediatricians to consult with psychiatrists regarding psychotropic medication prescriptions. Because of the lack of child psychiatrists, families are turning to these other physician-types to receive prescription drug treatments for their children (Smith 2012). A child psychiatrist I spoke with described this process as an effort to “*triage*” the growing need for pediatric interventions and these collaborative resources connect physicians with psychiatric guidance on medication side effects, dosage levels, indications, and interactions. This collaboration means that psychiatrists are disseminating the knowledge that was used to define them as biomedical experts in the mental health field with other prescribers. Psychiatrists are openly and willingly providing other prescribers with council regarding the prescription of these medications, serving to both solidify their standing within the biomedical profession and creating additional resources for children to receive psychotropic prescriptions.

While this collaboration is certainly providing more resources to help children access psychotropic medications, it does not address the increasing prevalence of pediatric mental illness. Through my interviews it appears that though other types of mental health professionals are available, can be more cost effective, and can provide treatments found to be equally efficacious to some medications, these professionals are

most often utilized to simply monitor psychiatric patients once they appear to be “stable” on their new medications. This disconnect between need and utilization may be understood as an ideological shift between professionals, where those operating within the biomedical model are being reinforced only to pursue and utilize other biomedical professionals and treatments.

Resources and Access

Interview topics regarding resources and access were primarily focused on psychiatrists and medications. Though other care providers and treatments are available, many interviewees still identified access as a prominent barrier between children and care. Access, in this context, must therefore be understood as access to prescribers and prescriptions, and not access to care in general. The access model created by Drs. Levesque, Harris and Russel (2013) conceptualizes the importance and impact access has on health and health outcomes. This model represents both supply side (provider) and demand side (patient) access factors. For this thesis the components of access being analyzed are availability such as workforce shortages, extended wait times, and alternative treatment options, affordability such as what is covered for patients and how professionals are reimbursed, and acceptability or the research and evidence used to inform prescribing practices.

The lack of available psychiatrists who specialize in children and adolescents does not match the enormous and growing number of children in need of care. As of 2015, there were 8,300 practicing child and adolescent psychiatrists in the United States

with an approximate 15 million children requiring services (Williams 2015). This low proportion of professionals with the ability to prescribe has created long wait times for patients. The average wait time in the U.S. for an initial appointment with a child psychiatrist in a major city is 50 days (Steinman et. al 2015). These statistics, and the responses of interviewees in this project seem to agree that there are not enough prescribers to attend to the needs of mentally ill children. Yet it is important to parse out here that it is not a deficit of mental health professionals being discussed, but a deficit of psychiatrists. This commentary reflects the hegemonic ideology that prescribers and medications are the most appropriate treatment route for pediatric mental illnesses. However, as can be seen through comments made by several interviewees, the ubiquity of these medications among children is not a result of their efficacy, but a result of ideological, cultural, institutional, financial, and political factors.

Once a psychiatrist becomes available, the next hurdle for access to care is affordability. Professionals are reimbursed for their services through third party payers, namely insurance companies, for whom they code their services, indicating how much they will be reimbursed (Bachman et al. 2006). As both an adult and child psychiatrist told me, psychiatrists receive the highest reimbursement rates for their services, higher than psychologists, counselors, therapists, and social workers. Of all these groups, and all the available services, the highest reimbursement possible comes from the prescribing of a psychotropic medication. This financial incentive was identified by several interviewees as a factor in the prescribing of these medications. In addition, for many mental health professionals the reimbursements they receive from insurance

companies such as Medicaid are not sufficient, and they do not accept that form of coverage. This leaves a limited number of professionals considered “with-in” network, with the majority of care providers falling “out-side” of network, meaning patients are required to pay for services out of pocket. These cost constraints from both the supply and demand side of care are having an impact on the type of treatment pediatric mental health patients are receiving.

According to several interviewees, another barrier exists between children and mental health care: appropriateness. Appropriateness of care is dictated by the amount of research and evidence available to professionals to inform their practices as well as what medications are approved of by the FDA (Levesque, Harris, and Russell 2013). There are obvious risk factors when conducting research with children and according to my interviewees, pharmaceutical companies have historically shied away from this population. This has led to a limited amount of research regarding these medications in pediatric populations, with the research that is available often reflecting short term and questionable results (Whitaker and Cosgrove 2015). This lack of research has hindered the ability of the FDA to approve psychotropic medications for children, forcing practitioners to prescribe off-label medications when treating children, meaning that they are prescribing without FDA guidelines regarding safety, efficacy, or appropriateness (Brenner 2014; Comer et al. 2010). Though a child psychiatrist told me that off-label prescribing is common across pediatrics in general, it is an important element to consider in prescribing psychotropic medications because so little is known about their efficacy, even in adult populations (Brenner 2014). This lack of evidence

and FDA approval coupled with increases in prescription rates for children begs the question as to how exactly these practices are “evidence-based”?

The Nexus of Influence

The biomedical system within the United States exists within a political, social, and economic context (Petryna, Lakoff, and Kleinman 2006). The structure and organization of these powerful institutions (state bureaucracies, welfare programs, insurance companies, research institutions, etc.) directly impact health policies and the way illness is conceptualized and treated (Petryna, Lakoff, and Kleinman 2006). While these power structures are prominent and broad in reach, how exactly they influence prescribing practices is often unclear. The nexus that mental health exists within helps reveal the interactions and interconnectedness of these power structures as they relate to health and prescription medications (Petryna, Lakoff, and Kleinman 2006).

The pharmaceutical industry is a key player within this nexus of influence, as it creates and promotes psychotropic medications. Sadly, health is often not the primary motivator of this industry and instead it focuses its attention on markets that are economically stable and have a reliable consumer base. The global sale of antidepressants grew 5% in 2002, and the sale of antipsychotics by 19% (ranking them as the 4th and 5th leading class of global pharmaceuticals respectively), reinforcing the message that these drugs are a lucrative investment for pharmaceutical companies

(Petryna, Lakoff, and Kleinman 2006). The success of these drug sales reflects the reliable market the industry has tapped into and secured through the introduction of direct to consumer advertising.

In 1997, North American pharmaceutical companies were granted permission by the U.S. FDA to run prescription drugs advertisements on television (Payton and Thoits 2011). Drug companies, through direct to consumer advertising (DTCA), have influenced the conversation surrounding mental health nomenclature and drug treatments in a profound way. By 2002 (5 years after DTCA was initiated) over 81% of respondents in an FDA survey had been exposed to DTCAs targeting mental health (Payton and Thoits 2011). The average viewer had seen “100 minutes of pharmaceutical commercials for every minute spent with his or her doctor, or more than 30 hours of television advertisements per year” and found that consumers with higher exposure to DTCAs were more likely to request advertised drugs (Payton and Thoits 2011). The pharmaceutical industry and their ability to advertise directly to consumers solidified their stability in the western market by controlling the narrative surrounding mental health and its treatments. A concern mentioned by several interviewees surrounding one of these narratives as it relates to pharmaceuticals is causality.

According to a licensed clinical social worker and a child psychiatrist, we are not focusing on causality. We do not know why these children are experiencing mental health issues, or what is causing unwanted symptoms, and we have neither the time, money, nor resources to do anything about it other than treat their symptoms with medications. As discussed earlier, these medications are only addressing biological

aspects of mental illness, but not psychological or social factors. This is a reductionist way of treating mental illness, and one that has been seen in mental health care before. During the 1950s and 60s, many women were diagnosed with “nerves” (Hari 2018). After 1949 it was commonly believed in the United States that there could be no greater fulfillment for a woman than being a successful housewife. Yet as this post WW-II sentiment took hold across the country, women who were achieving this coveted position of middle-class housewifery were simultaneously reporting an increase in depression and anxiety (Friedan 1984). While it was thought that marriage, relative material comfort, financial stability, social status, and motherhood would satisfy any woman, many felt isolated, trapped, undereducated, and a lack of identity. Advertisements bombarded women with desirable household appliances and beauty campaigns that reinforced the idea that women should be naturally satisfied by domestic bliss. Betty Friedan called this phenomenon “the problem that has no name”, because the possibility that the negative psychological symptoms experienced by many women were the direct result of their domestic roles was not discussed in the public domain (Friedan 1984). Instead it was often treated by Miltown, a drug coined as a “women’s drug” prescribed to assuage their many “vague complaints and anxieties”. (Prewitt 2015). The epidemic of unexplainable “nerves” that swept middle class female America *did* in fact have a catalyst, but dominant social commentary disabled any productive conversation. Women were instead viewed as being mentally weak and in need of medical intervention for their seemingly self-induced psychological discomforts. It is possible that much like these women, children today who are experiencing mental

health issues are being trapped in a world view handed to them by parents, doctors, and industries. Their emotional and behavioral disturbances reflect psychological, social and biological factors, which necessitates a broader and more inclusive conversation of pathology and treatment.

These interviews show that the conversation surrounding children and psychotropic medications is obstructed because of its placement within the biomedical model which itself exists within a political and economic context. The biomedical model is seen by both the public and professionals as an objective, scientific way to measure and treat health/illness, and has thus far been exempt from being critically analyzed like any other esoteric system of care (Lock and Scheper-Hughes 1996). As is seen in these interviews however, prescribing decisions are not always based on empirical, evidence-based, discrete diagnoses of illness. The prescription of these medications to children are often influenced by professional role changes, a lack of care providers, financial barriers, issues of evidence and approved medications, advertising, and the pharmaceutical industry. These factors show that biomedicine and pharmaceuticals are not the direct result of fact and truth, but of influence, decisions, negotiations, and meanings (Lock and Scheper-Hughes 1996).

By recognizing biomedicine as a relativist system, it is even more striking that psychological and social factors have been excluded as viable causal explanations for mental illness. The exclusion of these factors reinforces the idea that biomedicine is purely scientific and void of culture and continues to reduce and disable holistic conversations of health. The macro-structures discussed above, coupled with the lived

experiences of pediatric patients and their families all create the context in which mental health, pharmaceuticals, and professionals exist. The professionals interviewed for this thesis all practice within their own unique version of this context. Their practices are all, to varying degrees, influenced by professional roles, access, cost, evidence, and the biomedical model. Their experiences, recorded in this thesis, reflect their individual negotiations and choices made within these contexts and help reveal how each of these professionals views themselves, their practice, and the role of psychotropic medications for children.

Chapter 6: Conclusion

Mental illnesses are generally thought to be caused by one or more of the following: biological, psychological, and social factors (Wilson 1993). Yet since the 1980s, psychological and social explanations and treatments for mental illness have been consistently ignored as primary, viable, and competitive treatment options to pharmaceuticals (Wilson 1993). A national cultural shift towards medicalization has moved mental health into the biomedical model, a move that was supported and propelled by insurance companies, pharmaceutical companies, national professional organizations, and the public (Wilson 1993). This shift has had several positive outcomes. It has helped re-categorize issues such as PTSD as valid and recognized disorders, reducing stigma and increasing the availability of support and treatment. It has led to the removal of homosexuality from the DSM as there are no biological markers to indicate it as a symptom of neurological or behavioral deviance. And it has helped emphasize the need for empirical data collection methods to increase the consistency of diagnoses between patients and among professionals. It has brought prestige back to psychiatry through its new affiliation with “science” and “medicine”. And it has provided a physical, tangible option for hope in the form of psychotropic medications for patients suffering from mental illness. These advances should not be

minimized. However, the biomedical model also constrains and limits the way mental health is now conceived of and experienced within its larger economic, political, and social contexts.

Often, symptoms of mental illness such as depression or anxiety are signals that a psychological or social need is not being met, just as hunger and fatigue are signals that people need to eat and sleep. It is adaptive. Yet instead of addressing external factors of causality, biomedicine emphasizes the management of symptoms through the use of pharmaceutical drugs. The structural changes that took place within mental health over the past forty years have reframed the conversation into a purely pharmacological one and are now impacting the treatment of children with mental health issues regardless of the overwhelming evidence and research that advises against the ubiquitous use of psychotropic medications. The literature reviewed for this thesis, as well as some of my interviewees, describe these medications as appropriate only as a “*last resort*”. But in their description of practice, due to constraining circumstances, other interviewees describe them as their *only* resort. The data collected in this thesis show that for these professionals, the use of psychotropic medications for children with mental health issues is often the result of financial, political, institutional and biomedical pressures and not of objective scientific evidence or diagnoses.

Prescribers are not, of course, malevolent players simply operating under the control of industry puppeteers. They are caregivers, working under difficult and constraining circumstances, navigating a complex and sometimes invisible nexus of macro-level power structures. But there are essential factors that have been removed from

the conversation, reducing mental illness in children to a biological experience. Though these medications are sometimes effective in reducing unwanted symptoms, they do not address underlying pathology, which may be caused by a combination of biological, psychological, and social factors. It is imperative that we examine where these factors can be reinserted into the conversation of how to care for and treat children with mental illness. There must be a balance struck between benefiting from biomedicine when appropriate, while retaining a critical gaze at dominant ideologies, and reframing conversations of health back towards the patients and their individual experience of health and illness.

Anthropologists can continue this conversation by looking at other areas of health where discourse has been limited and reduced exclusively to biology. Exploring where, when, and how other factors of health lose their voice within the conversation may expose a way to prevent their elimination from happening in the future. It is also important to record the consequences of this silencing, emphasizing that a holistic approach to care will always be more appropriate than a reductionist one.

The job of mental professionals is much harder. Reintroducing psychological and social factors and treatments as competitive and complementary forms of care in the face of biomedicine and pharmaceuticals is daunting. Many interviewees said that the best form of treatment for children with mental illness was a combination of therapy and medications, but the efficacy of either one cannot be known if being used in tandem with the other. Perhaps, as the pharmaceutical board member discussed regarding the education program C-PACK for primary care physicians and pediatricians, mental health

professionals can be encouraged and reminded that they have the ability to recommend a medication be decreased or discontinued. They can advocate for their patients and collaborate with psychiatrists to decrease the use of medications and increase the use of psychological and social therapeutic services.

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