The Clinical Practices of Medical Family Therapists

A DISSERTATION

SUMBITTED TO THE FACULTY OF THE GRADUATE SCHOOL

OF THE UNVERSITY OF MINNESOTA

BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

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May 2013

Acknowledgement

This doctoral degree and dissertation project could not have been done alone. My family has been an instrumental part of my life and has shown constant support through my graduate studies. I want to thank my parents (Kyle and Robert) and step-father (Tim) for being there with me every step of the way through this journey. Other family members who live in Milwaukee, Austin and Indianapolis were key sources of encouragement across the country. My graduate committee has done an amazing job in mentoring me through this writing and learning process. My advisor, Dr. Steve Harris, has shown unconditional support and encouragement in my graduate studies, sacrificing his time to help me grow as a future scholar and professional in the field. I am forever grateful for his dedication to my academic development. Dr. Bill Doherty, the chair of my committee, was instrumental in the construction of this dissertation idea and has shared his unmatched wisdom on MedFT information with me on several occasions. Dr. Tai Mendenhall, my internal committee member, has mentored and collaborated with me on numerous academic projects, providing some incredible opportunities that have further advanced my research and clinical skills. Dr. Tom Skovholt, my outside committee member, was extremely flexible with his time and commitment to this project, offering unique perspectives and insights on this topic. Additionally, I want to thank my colleagues in the FSOS department, who really helped support me through some challenging times in the program. Finally, I want to thank AAMFT, CFHA and other national organizations who helped recruit participants for this study. To be a part of the Medical Family Therapy community is something I truly cherish and I look forward to the ongoing collaborations and advancements with other colleagues in the future.

Dedication

The dedication of the dissertation is for my grandfather, Eugene Zubatsky, who passed away in 2004. He was not only an instrumental part of my life, but was a huge motivator in me pursuing an advanced degree. His knowledge, compassion and talents that he offered to the world were unmatched my most. Months before his passing, he said, "Always pursue your dreams and aim for the best, so that you have no regrets in life when you look back." Throughout my time in the program, I've thought about him countless times and knew that he was with me in spirit during this entire journey.

Abstract

Although mental health professionals use the biopsychosocial approach and make collaborations with other providers in their practice, there is a lack of evidence in how effective Medical Family Therapists (MedFTs) are in their practice patterns with patients. The purpose of this study was to assess the clinical practices of Medical Family Therapists, investigating how likely MedFTs assessed for biopsychosocial issues in patients and what potential referrals for treatment were made. A purposeful and snowball sampling method resulted in 84 participants taking part in an online survey, recruited through various list serves, organizations and educational institutions. Although none of the author's hypotheses regarding participants making a biposychosocial assessment or referral for treatment were confirmed, MedFTs were more inclined to refer to medical providers than any professional in the patient's treatment after an initial assessment. Mental health professionals who consider themselves MedFTs may benefit from additional training or coursework when using this model in their practice.

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Chapter One

Introduction

Medical Family Therapy (MedFT) provides therapists with skills to treat a wide variety of problems in patient care. In this framework, family therapy can be more than treatment of behavioral problems and communication disorders in individuals, couples and families. MedFTs pay conscious attention to medical illness and its role in the personal life of the patient and the interpersonal life of the family (McDaniel et al., 1992). The field bridges psychosocial and physical health, examining the reciprocal influences between family, context, and individual physical functioning (Linville, 2007). Additionally, practitioners develop collaborative skills, providing opportunities for learning more about physical and biological aspects of problems and preventing the rigidity, burnout and psychosocial fixation of clients' health (McDaniel, Campbell & Seaburn, 1989).

In recent decades, MedFTs have had an increasing role in the medical care of patients, attending to issues outside of the psychosocial context of mental health. Many Medical Family Therapists have been trained in the biopsychosocial model of health care, which facilitates collaboration with medical professionals and multidisciplinary teams. They take a systemic perspective, that may help to locate family strengths, identify areas of concern and provide additional outside resources for the family (Becvar & Becvar, 1999; Boyd et al., 2011). By viewing and interacting with a patient and family through this lens, a MedFT attempts to address all areas that may influence a family's coping skills with medical or mental health issues. Identifying the family's beliefs and values, including their cultural, spiritual, and religious beliefs, allows the MedFT to assist family

members in understanding and accepting their situation (Doherty, 1995; Seaburn, 1996; White, 1996). This interdisciplinary shift in patient care is a departure from the traditional practices employed in medicine and mental health.

Historically, mental health and medicine have operated independently of one another, with professionals gradually forming a connection between the two fields over time. Medicine and Psychology have long been rooted in the Cartesian view that the mind and body are separate entities and should be analyzed and cared for as such (Gergen, 1995). From this perspective, physicians are trained to treat the body and therapists are trained to treat the mind (McDaniel, 1995). Although therapists have not neglected families, they have neglected the biological experiences and perspectives of patients and have not made successful collaborations with biomedical providers (McDaniel et al., 1992). Whitaker and Malone (1953) were among the first professionals in mental health to see the benefit that psychotherapy had in addressing medical issues, with a chapter in *The Roots of Psychotherapy*, titled "The Biological Basis of Psychotherapy." Family therapy pioneers such as John Weakland, Lyman Wynne, Edgar Auswald, Murray Bowen, and Salvador Minuchin later worked in medical settings, acknowledging the benefits of using family therapy to address both mental health and physical issues in clients.

Over the last few decades, more mental and physical health care providers have been working together, or collaborating, to better serve patients and their families. The partnership between medical providers and family therapists represents an integration of the biological and psychosocial processes with which patients struggle. When a patient is struggling with a medical illness and the therapist does not communicate or collaborate

with the medical provider, the therapy is very likely incomplete or even destructive (Ruddy, 2008). Psychotherapists who take the time and effort to create collaborative relationships with medical professionals will improve their patient care, enhance their referral networks and increase their professional satisfaction (Doherty, 2007).

In clinical practice, the joining efforts between biomedical and psychosocial treatments for patients are often a tenuous situation (Edwards, Patterson, Vakili & Scherger, 2012; Patterson et al., 2002; Strozier & Walsh, 1998). Collaborative practices have existed in various forms from the past, with medical providers serving as the anchors for structuring and supporting the psychosocial treatment efforts of patient care (Glenn, 1987). Many psychotherapists in private practice rarely collaborate with medical professionals. Therapists who do not know how to maintain collaborative relationships or do not recognize the advantages of collaboration may not make the effort to begin the process. Many psychotherapists may perceive the barriers to collaboration to be insurmountable (Ruddy, 2008). Even when patients ultimately connect with the psychotherapist, the frequent lack of collaboration between the psychotherapist and the patients' medical professionals reduces the effectiveness of both medical and psychotherapeutic treatments (Gilbody et al., 2006).

Numerous studies have investigated the collaborative efforts between Medical Family Therapists and medical providers (e.g., Blount, 1998; Doherty, 1996; Linville, 2007; Kessler & Stafford, 2008; McDaniel, 1995; Seaburn, 1996). Collaborative care can be seen as a spectrum of possible approaches to mental health and medical providers working in partnership with patients and their families (Seaburn, 1996). For other practitioners, collaboration can be seen as a significant shift in attitudes and care

practices, involving skills in communication and cooperation that may be outside of their training or experience. Differences in professional cultures, use of time and styles of treatment may also serve as potential barriers (McDaniel, 1995). Five distinct levels of collaboration in the health care system were defined in Doherty (1995), primarily between mental health professionals and other health professionals (medical physicians and nurses). The five levels were arranged in a hierarchical fashion, where the greater the need for systemic collaboration between providers, the greater the management for demanding cases.

To date, two studies (Clark, 2009; Harkness, 1998) explored the attitudes of the collaboration process between medical doctors and therapists. Clark's (2009) study included a survey of 240 family physicians, containing both open and closed ended questions about the consultation practices between doctors and therapists. Respondents estimated that 48% of patients in primary care could benefit from MFT services, but only 5% of their patients were actually referred to MFTs. When asked what would make MFTs more helpful collaborators, participants responded with themes such as "ideal collaborative practices", "MFT specialty awareness", "letting doctors know of their specific role(s)" and "overall attitudes doctors have about the MFT profession." Harkness (1998) presented a case study of a man suffering from depression and anxiety, where a family medicine resident needed to collaborate with mental health professionals on the psychosocial areas of this patient's health. The article effectively highlighted the benefits of having "on-site" collaborative training between a family therapist and family medicine physician, finding biopsychosocial strategies to address the symptoms of the patient.

This study looked to add to the findings in Doherty and Simmons (1995), the first clinical practice patterns study of MFTs. In this study, MFTs from the state of Minnesota were surveyed on practice-related issues across multiple domains. The authors explored: (1) How marriage and family therapists practice, (2) The relationship among length of treatment and presenting problem(s), and (3) The relationship between academic training and the practice patterns of Marriage and Family Therapists. Respondents reported working with clients with various medical issues in their respective practice. The most prevalent medical issues of clients reported in the study were chronic pain, gastrointestinal disorders, and Diabetes. These disorders served as the main medical issues presented in the clinical cases of this study.

There is a critical need in the Medical Family Therapy field to research whether therapists actually take a biopsychosocial approach when assessing for issues in clients and what possible action to take when collaborating with other providers. Do therapists assess for underlying medical conditions as a result of a psychosocial issue in clients? How do MedFTs' training and experience in health issues of mental health clients improve their effectiveness in identifying biomedical symptoms? How often do MedFTs make referrals to providers that specialize in a particular diagnosis or type of treatment? By addressing the clinical practices of MedFTs in assessing for biopsychosocial issues and making appropriate referrals for treatment, we can fill these critical gaps in the literature.

The purpose of the study was to assess the likelihood of MedFTs use of the biopsychosocial approach in assessing the health of clients who presented with initial concerns of an emotional or medical condition. Three clinical cases were used to assess

whether therapists correctly identified the underlying issues presented in a case. Furthermore, participants were asked to identify what possible course of action they took in making referrals for the patient or family in the case. The study asked a series of demographic questions, identifying therapists' practice experience, educational background, attitudes about referrals, and practices in taking a biopsychosocial approach to assess and treat patients. For the purposes of this study, a Medical Family Therapist was defined as "a family therapist who works primarily in a medically-based setting with the purpose of bridging the physical and psychosocial health of patients in treatment, while collaborating with providers and family members for coordination of care."

Chapter Two

Review of Literature

Introduction to Medical Family Therapy

Numerous studies have highlighted the need for further research in the evaluation of clinical practices of family therapists who work in medical settings. Linville (2007) urged more effectiveness research to evaluate and inform the development of a new professional arena, such as MedFT, in the context of the larger health care system. The first step towards conducting more precise research was to better understand what psychotherapists already knew about the treatment outcomes of family systems-oriented health care. In a study by Campbell (2003) on the effectiveness of family-based interventions for physical conditions, the research on family interventions and treatment for physical disorders was still in its infancy. Marlowe (2012) and Linville (2007) recommended that research must be done to outline how a MedFT operates within the medical context where s/he exists and how integration with other providers looks. Additional studies (e.g., Kessler & Miller, 2010; Mendenhall, Pratt, Phelps, & Baird, 2012) emphasized that specific metrics are needed to provide standardized ways of assessing what MedFTs do in clinical care and to compare their roles to others in the healthcare profession.

Furthermore, one of the ongoing challenges continues to be how therapists define certain aspects of the Medical Family Therapy framework. More specifically, research has been inconsistent in how Medical Family Therapy was defined, let alone what the responsibilities and competencies of a "Medical Family Therapist" should be within the context of the health care system. According to McDaniel et al. (1992), one definition of

MedFT was the extent of involvement and collaboration with other medical professionals as well as the treatment of illness of a patient. In other cases, Medical Family Therapy has been a sub-discipline of the marriage and family therapy field. As a specialty subset, MedFT focused on the medical conditions of clients and collaboration between medical and mental health providers (Linville Hertlein, & Prouty Lyness, 2007).

Four specific areas were explored regarding the background of the research topic. First, the author investigated how the history of medical family therapy progressed, with research findings from leading studies and authors. Next, the author examined the definitions of medical family therapy and the specific roles and functions carried out by therapists in medical contexts. Third, the author clarified what diagnoses and medical issues MedFTs treated in the context of the biopsychosocial framework. Finally, the author highlighted what types of collaborative practices were done between therapists and other providers to achieve better health outcomes for patients.

History of Medical Family Therapy

Medical Family Therapy is a relatively young sub-specialty founded initially at the intersection of family therapy and family medicine (Tyndall, 2012). The framework emerged from its parent discipline of Marriage and Family Therapy in the 1980s, when the role of the family therapist extended into the healthcare system through research, teaching and clinical practice. McDaniel et al. (1992) coined the term Medical Family Therapy (MedFT) to refer to the practice of therapists working with patients and their families who are coping with illness and who follow a biopsychosocial-systems perspective and a collaborative model of care. Several other mental health disciplines provided psychological and relational services in medical settings, but the intensive

training that MedFTs received in applying systems theory to their work with individuals, couples, families and healthcare providers across primary, secondary and tertiary care settings offered something important and unique (Linville, 2007; McDaniel, 1992).

Traditionally, many of the orientations and frameworks in the family therapy field developed their roots from work in medical settings. Several of the pioneers and contributors to the Marriage and Family Therapy field were once family physicians (e.g.; Nathan Ackerman, Murray Bowen, Milton Erickson, Salvador Minuchin, Lyman Wynne). Many of these theorists were housed in pediatrics, formulating systems-based concepts as a result of working with family members around the patient's illness (Doherty et al., 1994). Additionally, the specialty of Family Medicine, which initially arose from the general practice model, attracted a significant number of family therapists. At the same time, both family and psychiatric nurses used systems concepts in understanding their work with patients and families in medicine (Gillis et al., 1989; Wright & Leahey, 1987).

During the 1970s and 1980s, changes in medicine were insistent on the need for intelligent and active inclusion of the family systems perspective in health care. With iatrogenic risks and stresses that caused lengthy and costly visits for patients, came the therapeutic need to address serious psychosocial issues in medicine (Bloch, 1984). Interdisciplinary work in medicine was punctuated by Dym and Berman (1985), who issued a call for a collaboration between family therapists and family physicians to work together. Dym and Berman developed a fully integrated healthcare model in which family therapists and physicians worked with patients collectively, forming treatment plans that were conjointly constructed. It was encouraged that the family physician

interested in doing primary care work in the family context takes a systemic approach in the delivery of medical services to the family (Doherty & Baird, 1983). Experiments in collaborative care practices soon evolved, where family therapists, nurses and family physicians were working together using a biopsychosocial framework to look at patient care (Glenn, 1987).

In recent decades, there has been growing research on the role that families played in chronic illness and disabilities. Family therapists and researchers have become increasingly interested in physical illness. When providers used a systemic framework to view illness, they discovered that families had a strong impact on a family members' physical health (Campbell, 1986; Campbell & Patterson 1995; Doherty & Campbell, 1988). Within the last 15 years, the chronic care model has been the subject of substantial medical attention. This model identified that chronic medical problems require ongoing, interdisciplinary work from multiple care providers (Wagner et al., 2001). The model also suggested that psychosocial issues often interfered with optimal patient participation and compliance with medical care. However, such efforts have often not included assessing and treating the underlying psychosocial issues that limit effective coping with the illness (Ewart, 1990).

MedFT has been grounded in the research, theory, and application of collaborative models of care (McDaniel et al., 1992; Ruddy & McDaniel, 2003) that involved providers, patients, families and other members of influential larger systems. Two of the overarching goals in collaborative care practice are agency and communion (McDaniel et al., 1992; Seaburn et al, 1996). Agency is a term that when applied in a healthcare setting, refers to a patient's personal choices in dealing with illness and

healthcare. Promoting agency helps a patient and family set limits on the amount of control an illness or disability has over their lives. Communion is referred to as uniting people which include both familial and community support that can surround a patient during their illness. Although a serious illness or disability can severely isolate someone from the people who care for them, the quality of a patient's social relationships appears to be the most powerful psychosocial factor in someone's recovery of an illness (McDaniel, Hepworth & Doherty, 1992). These central concepts helped ignite the practice of MedFT that fostered the development and growth in training, research and clinical work.

There is substantial reason that the most effective response to chronic medical issues is improving the medical and psychological care delivered within primary care practice. There was evidence that supported the efficacy of evidenced-based family approaches and psychological interventions as part of medical treatment (Allen et al., 2002; Raine et al., 2002; Sobel, 2000). Psychological treatments to medical problems have demonstrated reductions in hospitalizations, physician visits, emergency room use, levels of pain, disability claims, medical costs and enhanced quality of life (Chambless, 1998; Dixon, 2007, Friedman et al., 1995; Parthasarathy, 2003; Pyne, 2003). Appointments are kept at a much higher rate than previous decades, with better compliance of treatments and medications (Haynes et al., 2002). When exploring the most frequently presented medical problems in primary care, the majority often have significant psychological components. Treatments of these psychological issues were necessary to assist the achievement of successful medical outcomes (Kroenke & Mangelsdorff, 1989).

Role of Medical Family Therapists

Medical Family Therapists are trained in the biopsychosocial framework of health care, one that sees the health of an individual from multiple perspectives and facilitates collaboration with other professionals. Additionally, MedFTs take a systemic perspective to patient care, which assumes that a change in one part of the patient's relationship or system causes change in another part of their life (Becvar & Becvar, 1999; Strange, 2002). Medical Family Therapists have made significant advances in applying the biopsychosocial approach to family systems work, the family as a unit of care and the multiple contexts of an individual's illness (Clark, 2009). In regard to chronic illness, MedFTs have informed MFTs in the ability to apply the biopsychosocial framework to patient care. This application involved a systemic integration of physical, emotional, relational and spiritual health, while incorporating a family systems framework in practice (McDaniel, 1992; Rolland, 1994; Weihs et al., 2002).

MedFT Techniques

McDaniel et al. (1992) developed seven core techniques that helped operationalize the Medical Family Therapy model. These techniques went beyond the basic family therapy interventions seen outside of a medical or clinical setting. The techniques integrated the focus of the health and illness of the patient into a systemic framework, representing specific biopsychosocial aspects of illness that were expanded by therapists with differing theoretical backgrounds. These core techniques included: (1) Recognize the biological dimension, (2) Solicit the illness story, (3) Respect defenses, remove blame and accept unacceptable feelings, (4) Maintain communication, (5) Attend

to developmental issues, (6) Increase a sense of agency in the patient and the family, and (7) Leave the door open for future contact.

Additionally, MedFTs are trained to appreciate differences between medical and mental health professions regarding theoretical orientation, confidentiality, language, schedule availability, and logistics such as practical space (Edwards & Patterson, 2006; Patterson, 2002). MedFTs who work from a family systems approach may see the patient from multiple perspectives in the individual's health. In contrast, providers working from a biomedical approach are more likely to view the source of the problem from an "expert" perspective (Alfuth & Bernard, 2000; McDaniel et al., 1995; McDaniel et al., 1992; Seaburn et al., 1993). MedFTs are trained to integrate themselves into the medical setting and work collaboratively to ensure that legitimate information, relevant to the treatment plan, is exchanged in an ethical manner amongst providers (Edwards & Patterson, 2006; Grauf-Grunds & Sellers, 2006). Furthermore, most MedFTs are trained to become familiar with and use the language and abbreviations of medicine when writing case notes and consulting with providers about patient information (Bischoff et al., 2003; McDaniel et al., 1992; Patterson et al., 2002).

Training and supervision. There are unique needs which MedFT trainees must consider in their supervision and training development. Four main elements that supervisors of MedFTs need to consider during their training are: (1) An understanding of the medical culture, (2) Educating trainees to fit into the medical system, (3) Investigating patients' biological needs and (4) Paying special attention to self-of-the-therapist issues (Edwards & Patterson, 2006). It is by immersion into the medical culture that students learn how the biomedical perspective to patient health is different than the

traditional mental health framework (Grauf-Grounds, 2006; Seaburn, 1996). Only with respect for a variety of healthcare providers, disciplines and cultural differences can a MedFT successfully integrate him/herself into a medical setting, which can be emphasized through this type of supervision (Patterson et al., 2002).

Professional scopes and roles. Behavioral health integration calls for an expanded role in the scope of a medically-based therapist. It is crucial for therapists to clarify "who they are" upon entering the practice of medical settings. They may be concerned with fitting into the system, being attentive, capable and credible while not losing their professional identity. The more seasoned a therapist becomes in integrated care, the more s/he learns and identifies with the general responsibility and skills that are required in this professional capacity (Patterson & Peek, 2002). Mental health providers must also adjust to the pace of the medical world, that includes length of appointment times (McDaniel, 1990; Seaburn, 1996) and adjusting to interruptions during the day (Edwards & Patterson, 2006). Physicians work at both a short and quick pace, and because they are generally at the top of the medical hierarchy, mental health providers oftentimes must match this type of pace (McDaniel, Hepworth & Doherty, 1992).

Diagnoses that MedFTs Treat

Medical Family Therapy trains clinicians to work with multiple issues affecting the patient's health and well-being. The mission of therapists who work in primary care is to take care of people, across all diseases and conditions, including the psychosocial ones. Many of these problems and diseases coexist, present similar clinical challenges, and freely interact with one another (Patterson & Peek, 2002). MedFTs have worked in providing care for families struggling with a myriad of these chronic illnesses, such as

infertility (Burns, 1999; McDaniel, 1992), Cancer (Yeager, 1999), Asthma, Diabetes, Cardiovascular and neurological disorders (Campbell & Patterson, 1995), Somatoform Disorders (McDaniel, 1995), and Anorexia Nervosa (Dare & Eisier, 1995). Additionally, there are opportunities for therapists to work in medical specialties such as rehabilitation medicine, reproductive health, cardiac rehabilitation and geriatrics (Seaburn, 1996).

Applications. One of the earliest medical conditions connected to the clinical application of MedFT practice was with infertility and reproductive issues. A novel publication in the field (McDaniel et al., 1992) presented clinical case examples which demonstrated the various strategies applicable for MedFTs to help couples face infertility issues. Genetics and infertility (Burns, 1999) were areas that MedFTs could be well suited to treat regarding the use of both the biopsychosocial approach and application of agency and communion to a medical setting. Burns made a call for MedFTs to attend to genetics counseling and infertility issues of patients. As genetic factors become more relevant in reproductive medicine, there has been a growing awareness of the importance of a multidisciplinary approach to both medical treatment and counseling.

In recent years, different programs, healthcare interventions and clinical recommendations were noted in the MedFT treatment for diseases such as Diabetes (Robinson, Barnacle, Pretorius & Paulman, 2004), Fibromyalgia (Preece & Sandberg, 2005), somatoform disorder and Chronic Fatigue Syndrome (Szyndler et al., 2003). The University of Nebraska Medical Center developed a collaborative care team that consisted of a Family Physician, Nurse Practitioner, Physician's Assistant, Pharmacist and MedFT in the treatment of Diabetes patients. Through this approach, MedFT interns offered skills such as patient interviewing, accessibility, collaborative skills and a holistic

perspective of patient care to the collaborative team (Robinson et al., 2004). Findings from a study of 150 participants with symptoms of Fibromyalgia showed that providers who took a biopsychosocial approach would have a better understanding of how family dynamics impact patients' management of treatment (Preece & Sandberg, 2005). Biopsychosocial treatment was particularly useful in helping patients and families handle issues around Fibromyalgia, such as (1) learning pain coping techniques, (2) dealing with depressive-related symptoms, (3) addressing marital problems as a result of Fibromyalgia symptoms, and (4) fostering emotional support. The biopsychosocial model was also applied to patients with Chronic Fatigue Syndrome, where a multidisciplinary approach was used to treat medical-psychosocial issues in adolescents with the disorder (Szyndler, 2003).

Doherty and Simmons (1996) conducted a national study on clinical practice patterns of Marriage and Family Therapists. The study collected data from MFTs on numerous clinical topics related to the mental health services which MFTs provide to their clients. In the area of "professional practices," a percentage of participants reported treating specific medical issues of clients in their practice. The following are three of the most prevalent medical conditions that participants reported from the Doherty and Simmons study and served as the "medical" condition in each of the three clinical cases used in this study: Diabetes, Gastrointestinal disorders, and Chronic pain.

Diabetes. Diabetes is one of the most common chronic concerns in primary care. In addition to the physical symptoms of the disorder, this condition is associated with increased depression/anxiety symptoms, decreased overall physical functioning and higher general psychosocial distress (Carney, 1998; Katon et al., 2003; Murray & Lopez,

1996). Patients with Diabetes appear to have increased risk of developing major depressive symptoms as a result of physiological changes from the condition. Depression may adversely affect self-care regimens as well as increased risk of medical complications such as Diabetic Retinopathy (de Groot, 2001; Gavard, 1992). Other studies have shown that depressive symptoms are associated with glucose dysregulation, partly due to the impact that poor psychological functioning has on self-care management (Anderson, 2001; Lustman et al., 2000). As a result, depression associated with Diabetes produces anywhere between 50% to 75% increase in health care costs for patients in the United States (Simon et al., 2005).

Many challenges face physicians and mental health providers in treating individuals with Diabetes. The complexity and chronicity of Diabetes presents special challenges for family physicians, whose major responsibility is the screening and prevention of diabetes-related complications (Brown et al., 2002). Physicians have a difficult time attending to multiple co-morbid issues related to the symptoms of Diabetes. Patients are often times resistant to the referral process between providers and feel blamed for the way they feel about their medical condition. Patients may also feel blamed that they are doing everything possible to take care of themselves, yet medical providers sometimes don't understand the impact of the illness on patients' psychosocial functioning (Kessler & Stafford, 2008).

Different treatment strategies have been used to attend to both biomedical and psychosocial symptoms of patients with Diabetes. The Pathways Collaborative Care Model (Katon et al., 2004), that enhanced support of anti-depressant medication and psychotherapy during treatment, improved depression care and outcomes in patients with

comorbid Diabetes and depression over those with usual primary care treatment. Behavioral Family Systems Therapy for adolescents with Diabetes (Wysocki et al., 2006) was shown to improve overall family conflict and treatment adherence to A1c levels in Diabetes patients compared to those receiving educational support groups or standardized care. Lustman (1998) used a cognitive behavioral therapy and psychoeducational approach to treat depressive symptoms of patients with Type 2 Diabetes. Patients not only improved in the remission of depressive symptoms, but showed significantly better control of hemoglobin levels at follow-up compared to the control group.

Gastrointestinal disorders. Psychiatrists and mental health providers frequently see patients with Functional Gastrointestinal Disorders, such as Functional Dyspepsia and Irritable Bowel Syndrome, both in consultation or referral from other physicians. These disorders frequently co-occur with depression and anxiety disorders in patients. Stress, anxiety and mood disturbance are thought to play a large part in their symptoms, presentation and course (Levenson, 2007). Anxiety and mood disorders very frequently precede or coincide with the onset of Irritable Bowel Syndrome, suggesting a close link between the psychiatric disorders and gastrointestinal symptoms (Creed, 1999). Patients with Celiac Disease tend to show a high prevalence of panic disorders and forms of anxiety, along with strong associations of subclinical thyroid disease (Carta et al., 2002).

Previous research in the biopscyhosocial approach of gastroenterology has considered the degree to which interacting factors explain a given illness condition. The task was to determine how the contributing biologic and psychosocial factors affect the individual and, using this information, to develop rational diagnostic and treatment strategies (Drossman, 1996). When problems in Functional Gastrointestinal Disorders

extend beyond biological nature, mental health consultation and treatment may include: (1) psychiatric disorders (e.g., major depression, panic disorder) that require specific treatments; (2) a history of abuse which comes to light during consultation and may be interfering with adjustment to them current illness; (3) serious impairment in daily function which requires specific treatment to improve coping skills; and (4) somatization, where multiple symptoms are leading to numerous consultations across specialties (Drossman et al., 1999). One study (Gerson & Gerson, 2003) found that short-term treatment with both a gastroenterologist and psychologist working collaboratively was more effective in relieving pain symptoms in patients with chronic irritable bowel syndrome than providing solely medical treatment.

Chronic pain. Pain is one of the most common conditions that patients seek treatment in health care. The prevalence and cost for chronic pain is a major medical and mental health problem in the United States, with individuals 50 and older twice as likely to develop symptoms (Gatchel 2004; 2005). Opiate therapy can be highly effective in the control of pain. However, about 5% to as high as 20% of people using psychoactive medications for pain management end up having either substance abuse or addiction issues (Grinstead, 2002; Stimmel, 1997). From 1997 to 2002, the medical use of the four most common types of opioid medication in the United States increased markedly. In the same period, the abuse of opioid analgesics increased from 5.75% in 1997 of all abuse, to 9.85% in 2002 (Gilson et al., 2004).

Because chronic pain has such a profound impact in all areas of an individual's life, providers who treat these patients must be able to integrate information across biological, psychological, social and spiritual domains. Thus, it has become increasingly

important to develop models of collaborative care which address the biopsychosocial-spiritual needs of individuals with chronic pain issues (Kessler & Stafford, 2008). The biopsychosocial-spiritual distinction between disease and illness is analogous to the distinction that can be made between non-inception of pain and the subjective experience of pain (Gatchel, 2007). Pain cannot be evaluated comprehensively without an exploration of the whole individual exposed to the triggers of pain (Waddell, 1987). Additionally, multifaceted, collaborative interventions promoted concordant care and improve conditions for pain patients in primary care (Bodenheimer et al., 2002; Williams et al., 2011). This collaborative care integration approach has been shown to be more effective than "treatment as usual" for individuals with chronic pain disorders (Dobscha et al. 2009).

Collaborative Practices

Over the last few decades, more mental and physical health care providers worked together, or collaborated, to better serve their patients and the patients' families. There has been a variety of terms used to describe a collaborative relationship between mental and physical healthcare providers. Some of the terms include; "medical family therapy," "family systems medicine," "collaborative family healthcare," "shared care," "collaborative care," "integrated care," "biopsychosocial care," "patient centered care," and "citizen healthcare" (Hodgson, 2007). Because there is no one standardized model of collaborative healthcare, there are significant differences in the ways that providers engage and talk about the treatment process (Boyd et al., 2011). Therefore, it is vital in determining how the term "collaboration" is used amongst multiple members of a treatment team in the coordination of care for the future (Linville, 2007).

Collaborating with medical providers serves a central role in the practice of Medical Family Therapy. This partnership between medical providers and therapists represents a critical integration between the biological and psychosocial aspects of a patient's health (McDaniel et al., 1992). MedFTs who collaborate with medical and healthcare providers expand their entire view of the patient by asking them about their health, encouraging them to see a medical professional, and becoming knowledgeable about medical issues in mental health. These professionals see communication with the patient's other providers as the norm, rather than the exception, and as an important part in providing comprehensive care (Ruddy, 2008). Gawinski et al. (1999) pointed out the importance of quickly establishing collaborative relationships healthcare settings. A proactive behavior is required on the part of practitioners and well as an understanding of the medical culture which they're entering. By creating these positive relationships with other providers of care and acknowledging the benefit which each healthcare contributor provides, MedFTs can create successful collaborative practices (Boyd, 2011).

Several models and options for collaborative practice have been offered in the coordination efforts between physicians and therapists (Doherty, 1995; Hepworth & Jackson, 1985; Seaburn et al., 1996). Hepworth and Jackson (1985) developed a classification system that defined distinct types of collaborative practices between therapists and family physicians. The authors applied clinical cases common in a medical context to each type of collaborative practice. *Indirect consultation* occurred over the phone or via a curbside consult, in which the therapist or physician provided suggestions, support or information in a brief period of time. *Co-therapy*, the most infrequent form of collaboration, involved the physician and medical family therapist meeting with the

family together and each one focusing on their respective areas of expertise. Finally, a *limited referral*, the most frequent form of collaboration, involved varying degrees of communication and interaction between the provider and therapist in which concurrent treatment occurred in a particular area of expertise.

Doherty (1995) defined five distinct levels of collaboration between mental health and other providers. These levels offered choices on how professionals work together, as well as the depth and sophistication needed for collaboration between mental health and other health care professionals. The levels were constructed in a hierarchal fashion, which assumed that the greater the level of systemic collaboration, the more adequate of managing difficult cases would be. These five levels were defined as: (1) minimal collaboration, (2) basic collaboration at a distance, (3) basic collaboration on site, (4) close collaboration in a partly integrated system, and (5) close collaboration in a fully integrated system.

Shortly after these models of collaboration were developed, Seaburn (1996) introduced various types of collaboration between providers, where collaboration is seen as an overarching spectrum. The spectrum of collaboration encompassed the ability for professionals, patients and families to create collaborative relationships, depending on various factors within the patient's care. The basic premise of the spectrum was that various forms of collaboration could be accomplished no matter what set of circumstances are presented in the case. This collaboration model was separated by five "bands, representing the breadth of collaboration: (1) parallel delivery, (2) informal consultation, (3) formal consultation, (4) co-provision of care, and (5) collaborative networking.

Relationship building and continued collaboration with the healthcare team are critical components in the integration for MedFTs in a medical setting (Doherty et al., 1994; McDaniel et al., 1992). The strongest asset that MedFTs have is their ability to build relationships and partnerships with other medical providers in providing effective patient care (Bischoff et al., 2003; Grauf-Grounds, 2006; Seaburn et al., 1996). MedFTs are trained to balance between taking a "one-down" position, where they may play the role of a teacher in the medical context, while being able to convey their value as members of a healthcare team (Bischoff et al., 1995). Joint meetings between the therapist, provider and patient can also be beneficial to the therapist-provider relationship as well as increasing provider and patient buy-in to the integration of therapy into treatment plans (McDaniel et al., 2001).

Communication is another critical skill for MedFTs, for it is through this mechanism that the provider and practitioner insight is increased and MedFT interventions are delivered (Anderson et al, 2008). Communication skills are critical in managing referrals and maintaining relationships with patients, families, and healthcare providers. MedFTs should apply a variety of communication modalities through use of the systems consultation model (Wynne et al., 1986). This model involves identifying the person making the referral and his or her goals and desired outcome for the consultation. The Medical Family Therapist is then able to navigate this system in a way that benefits both the patient and the physician. The model avoids a one-way referral process to the provider, facilitating an open level of communication among team members. MedFTs also take advantage of communicating face-to-face with providers,

usually in the form of hallway consultation, which summarizes the main points of a case in a shortened period of time (Seaburn et al., 1996).

Collaborative training has applied these concepts for MedFT trainees in several healthcare settings. Three educational programs have reported training models for MFTs to work collaboratively in medical-based settings and healthcare providers' offices (Gawinski, 1991; Hepworth, 1988; Muchnick, 1993). Joint efforts to create collaborative models have been established for family therapists and primary care providers (Patterson, 1996; Seaburn, 1996). Two universities have offered psychosocial training that includes live supervision for medical residents and therapists focusing on interviewing skills and collaborative care (Saeburn, 1996). Specific training in MedFT will facilitate MFTs ability to collaborate and provide comprehensive, biopsychosocial-spiritual care in conjunction with a client's family physician and other practitioners on the medical team (McDaniel et al., 1992). As with any relationship, it is important to take a learning stance in order to begin forging collaborative relationships with family physicians (McDaniel, 1992; Patterson et al., 1992).

Several benefits come out of medical family therapists collaborating with physicians and other health care providers on the health and well-being of clients and their families. Medical Family Therapy provides therapists with skills to treat a wide variety of problems and increases the scope of clinical practice. MedFTs bring an excitement that enhances the work therapists accomplish with patients and families. Additionally, MedFTs pave the way for new changes in the delivery process of the health care system (McDaniel, 1992). Educated together, physicians and therapists can achieve a level of comfort and understanding of one another's field, which does not occur in

traditional medical models (Harkness, 1998). Family physicians have identified an increased need for MFTs to have collaborative communication, proximity to their practice, specialty information and ease of referrals regarding the collaborative practices of patient care (Clark, 2009).

Some significant challenges and barriers are also prevalent in the collaboration of medical and mental health providers. The realities of managed care have made it difficult for providers to collaborate because many healthcare agencies deny both providers in a patient's treatment. Anticipating these barriers in coverage for patients are important for clinicians working in medical settings (Campbell, 2003). Understanding the cultural and structural differences between medicine and family therapy takes continual learning and practice for new MedFTs (McDaniel et al., 1992; Patterson et al., 2002). Physicians identified several roadblocks when referring patients to mental health professionals, that include patient reluctance, unavailability of appropriate mental health professionals in rural areas and lack of affordability of mental health (Clark et al. 2001). Additionally, collaborative work takes extra time and energy compared to individual-decision making (Patterson et al., 2006). Despite some of these barriers in the collaboration between providers, there is a growing need for collaborative medical-psychological approaches to the treatment of certain medical conditions (Kessler & Stafford, 2008).

Clark et al. (2009) and Harkness (1998) examined the perspectives on how family physicians collaborate with MFTs regarding the referral process and treatment options for patients. Family physicians were quite interested in the referral process in some form, but faced several barriers towards collaboration. Additionally, physicians reported that they were often unaware of MFTs in their community and unfamiliar with the discipline

as a whole. However, no studies to this date have addressed the factors that impact how therapists assess for medical conditions in their clients or how the referral process is made to primary care physicians and other specialists for conditions outside the scope of traditional MFT treatment.

The Biopsychosocial Model

The biopsychosocial model, first developed by Engel (1977), challenged the medical orthodoxy that at the time was reductionistic and focused solely on the disease of the person. Engel believed that a biomedical perspective limited the understanding of illness, offering an alternative perspective that the person's body, mind, relationships, and social context interact and influence each other continuously (Engel, 1977, 1980). Engel addressed a significant gap in the way in which the medical model was seen when treating patients. The biological component of the biopsychosocial model seeks to understand how the cause of the illness stems from the functioning of the individual's body. The psychological component of the biopsychosocial model looks for potential psychological causes of a health issue such as lack of self-control, emotional turmoil, and negative thinking. The social component of the model investigates how different social factors such as socioeconomic status, culture, poverty, technology, and religion can influence health (Engel, 1977).

The constructs of Engel's model was largely influenced by general systems theory and the work of Ludwig Von Bertalanffy. When speaking on systems theory, Bertalanffy wrote:

> Since the fundamental character of the living thing is its organization, the customary investigation of the single parts and processes cannot provide a

> complete explanation of vital phenomena. This investigation gives us no information about the coordination of parts and processes. Thus the chief task of biology must be must be to discover the laws of biological systems (Von Bertalanffy, 1972).

In its simplest terms, systems theory addresses the behaviors of systems in regards to stability and change (Van Heden, 2001). The application of systems in families includes information processing such as feedback loops, self-maintenance, equilibrium and self-organization. Engel (1977) began to apply many of these systems concepts to the medical care of patients, providing a better lens to understand how all levels of the biopsychosocial model simultaneously effect each other and how health care interventions affect various levels of the human experience (Ruddy & McDaniel, 2003).

In the 1990s, many theorists realized that a spiritual component of this model needed to be addressed when assessing for the overall health and coping of illness. Thus, the term "biopsychosocial-spiritual" was adapted, including the personal beliefs and values of patients and their families in the treatment of chronic conditions (White, 1996). Spiritual well-being around illness referred to a sense of meaning of purpose in life, faith, and comfort with existential concerns (McClain, 2003). The spiritual assessment of patients focuses on one's perceptions and beliefs, in which the tools developed according to this model resemble assessments used for psychosocial issues (McIllmurray, 2003). In a biopsychosocial-spiritual interview with clients, patients answer a series of standard questions that contribute to an assessment of spiritual need(s) in coping with an illness (Hodgson et al., 2007). Wright, Watson and Bell (1996) offered the first resource to specifically address clinical strategies around the beliefs of family members and

interventions around specific diagnoses. The authors believed that change in family structures involves changes in the biopsychosocial-spiritual structures of both individual family members and the clinician.

Medical Family Therapy and collaborative care work from a biopsychosocial-spiritual and family systems model, actively encouraging integration between therapists and health care professionals. From this perspective, therapists combine the holistic elements of a patient's symptoms with the systemic influences of the illness, and use them simultaneously with patients, families, health care professionals, community groups and agencies (McDaniel et al., 1992). In addition, Medical Family Therapy strives to enhance agency, a sense of personal choice and communion, a sense of interpersonal connection or families suffering with health problems (McDaniel, 1995). This paradigm shift provides a framework for increasing collaboration between medical professionals and psychotherapists. Psychotherapists must recognize the relevance of the patient's mind-body interaction. Also, providers should recognize the impact of chronic disease and physical illness, such as obesity, chronic pain, diabetes, infertility, Alzheimer's disease, heart disease, as well as the role of stress in disease progression.

The biopsychosocial model helped guide the framework of this study, which investigated whether MedFTs truly saw client's problems from a variety of perspectives. This model is crucial for both physicians and MedFTs in understanding the various meanings and causes of psychosocial problems that patients report. Because MedFTs are trained to see the overall health of clients from this framework, MedFT participants should have been able to effectively assess and refer for medical issues in the clinical cases from this study.

Need for the Present Study

The purpose of this study was to fill in a critical gap in the literature in how Medical Family Therapists used a biopsychosocial framework to make an assessment of their clients. There is little research to date which has examined how MedFTs make referrals to medical professionals and other specialists after an initial assessment. Clark et. al (2009) examined the perceptions of Primary Care Physicians in the referral process with Marriage and Family Therapists. Although the study looked at the attitudes of how physicians perceive MFTs, no evidence of collaborative practice patterns was researched by the authors. Additionally, this was the first study to only sample clinicians who identify themselves as Medical Family Therapists and evaluated their clinical competencies in practice. This study could help address the need for specific research measures and outcomes outlined in previous research (Kessler & Miller, 2010; Mendenhall et al., 2012) regarding the clinical work of MedFTs.

Several articles have talked about the need for MFTs and MedFTs to collaborate with other health care professionals (e.g., Harkness, 1998; Ruddy & McDaniel, 2003; Seaburn et al., 1996; Tyndall, 2012). Mental health professionals are often times the first point professional in an individual's entire health care system (Ruddy, 2008). Because MedFTs and other mental health professionals usually have longer appointments than medical professionals and specialists, it is critical that therapists conduct a comprehensive assessment of clients' problems and consider appropriate referrals when necessary. If therapists either fail to adequately assess for physiological, social or spiritual issues in patients or withhold important medical information from specialists, this can put patient's health and well-being in jeopardy.

Additionally, Marriage and Family Therapists working in any clinical capacity have an ethical responsibility to initiate the referral process for conditions outside the scope of practice in the field. It is unclear whether Marriage and Family Therapy training programs have been preparing students to adequately assess for biopsychosocial issues present in their patients. The AAMFT core competencies (AAMFT, 2004) states that "MFTs should have the capacity to make appropriate referrals when necessary for the care of clients (p.2)." Overlooking this critical skill for therapists in training raises potential ethical concerns in how MFTs are assessing the scope of patients' overall health.

Research Questions

This study had two primary research questions:

1. How likely were MedFTs to use a biopsychosocial approach in assessing the health of patients?
2. How likely were MedFTs to make a referral for treatment when a course of action was necessary?

Hypotheses

The following hypotheses were constructed for the current study:

1. MedFTs with more years of clinical experience will have successfully identified a biological, psychological and social issue contained in each of the clinical case vignettes compared to MedFTs with fewer years of clinical experience.
2. MedFTs with more educational and practicum training in Medical Family Therapy will have successfully identified a biological, psychological and social

issue contained in each of the clinical case vignettes compared to MedFTs with less training.

3. MedFTs who practice in a medical or hospital based setting will have successfully identified a biological, psychological and social issue contained in each of the clinical vignettes compared to those who practice in a “non-traditional” medical setting or employment.
4. MedFTs who had more years of clinical experience were more likely to make a referral for treatment in each of the three vignettes than those who had less training.
5. MedFTs who had more educational and practicum training in Medical Family Therapy were more likely to make a referral for treatment in each of the three vignettes than those who had less training
6. MedFTs who practiced in a medical or hospital-based setting were more likely to make a referral for treatment in each of the three vignettes than those who practiced in a “non-traditional medical setting or employment.

Chapter Three

Methodology

Description of the Study

The purpose of this study was to investigate whether Medical Family Therapists used a biopsychosocial approach to assess patients' health issues and whether they made a necessary referral for treatment regarding the patient's care. Little research exists regarding the clinical practices and judgments of Medical Family Therapists. In fact, little is known about what roles and responsibilities Medical Family Therapists have in the context of the current health care system (Tyndall, 2012). This study is significant because it was the first study to sample solely Medical Family Therapists and assess for their clinical competencies in both assessment and referral practices.

Participants

Participants for this study were gathered using a convenience sampling method, a non-probability process of gathering information from MedFTs. This type of sampling was the most effective method for this study because of the concentrated percentage of mental health practitioners who practice medical family therapy. The author used a list of memberships and organizations to which Medical Family Therapists predominantly belong (Collaborative Family Healthcare Association, Society for Behavioral Medicine, Medical Family Therapists Group on Facebook, and the Medical Family Therapists Group on LinkedIn). Convenience sampling has been performed in past studies to recruit AAMFT clinical members regarding their practices and attitudes of certain clinical issues (Clark et al., 2009; Dankoski et al., 2007; Dersch, Harris & Rappleyea, 2006; Schacht, Dimidjian, George & Burns, 2009; Springer & Harris, 2011).

More specifically, the sampling method was purposeful in recruiting Medical Family Therapists based on specific criteria regarding clinical experience, background and training. Participants must have met the minimum inclusion criteria to be part of the study:

(1) Participants must have had at least one year of clinical experience doing therapy in a medically-related setting
(2) Participants must have completed at least two years of coursework in a master's program in Marriage and Family Therapy, Psychology or related field in mental health
(3) Participants must have collaborated with professionals outside of their discipline on at least two clinical cases

The intended sample size targeted for this study was 96 participants. This number was based off of the sample size determination for regression analyses in Bartlett (2001). In determining the appropriate sample size, the author narrowed down several factors to reach this number. The author assumed that the population size needed to draw from for Medical Family Therapists was 500. Then, the determination was based on using continuous data, based on analyses which included logistic regression. The author set the margin for error at .03, with an alpha=.05 and t=1.96. A total of 486 individuals from various employments, universities and agencies were invited to participate in the study. The author selected this number to ensure that the required sample size was met. The anticipated response rate from intended participants was 15-20%.

Procedures

A four stage approach of recruitment was accomplished for this study. This recruitment strategy followed the concepts applied by the Dillman method (2000), which highlighted certain steps for recruitment in internet survey designs. Dillman based the methodology for this approach on the tenets of social exchange theory. He argued the notion that stimulus (in this case emails) need to be different each time to increase the effectiveness of respondents participating in the survey. Dillman used a series of four contacts in an attempt to achieve maximum response rates from prospective participants. The four recommended steps (Appendix C) for recruitment occurred in the following order: (1) A brief pre-notice email, (2) an invitation to the study with an attached informed consent, (3) a follow-up contact email, and (4) a final email reminder.

Previous studies have used this approach in recruitment of participants in mental health and medical research. This approach was able to reach otherwise difficult samples, where online emails and groups could find specific populations (Estabrooks et al., 2003; Jadad et al., 2001; Siebert, 2003). Additionally, online surveys have several advantages over paper-pencil surveys. These advantages include lower cost, ease of data entry, flexibility and control over the format. The mental health fields, an additional advantage is the ability to access individuals who are normally not involved in the mental health system (Granello & Wheaton, 2004).

The survey for this study was constructed using Survey Monkey, an online survey and questionnaire tool used for research purposes. The author constructed the survey in a user-friendly format, with instructions given to participants prior to starting the survey. Participants had the option to save their status in the survey at any point and return back

to that point at a different time. The author created specific settings so that participant completion of surveys could be tracked on a central database.

This study followed a systematic procedure for participants completing the online survey (Appendix A). First, participants were asked to complete a 14 item demographic questionnaire portion of the survey. This section asked information about participants' background, training, experience and attitudes of clinical practices. Participants must have answered certain questions on the demographic section in order to move onto the clinical vignette section of the survey. A prompt was then given to participants, which explained that there would be a series of three clinical vignettes to read, followed by three questions to answer for each vignette. The participant was not timed when reading and completing questions on the survey. Participants were allowed to go back to a previous question on any clinical vignette in the survey.

Participants were then given a series of hypothetical clinical vignettes (Appendix B), which outlined a typical case that a MedFT would see in treatment. Each vignette contained information regarding a specific biological, psychological and social issues present in the patient's life. The medical issue in each of the three clinical vignettes (Chronic pain, Gastrointestinal disorder and Diabetes) was taken from a study by Doherty and Simmons (1996) regarding practice patterns of Marriage and Family Therapists. In the study, MFTs were asked what were the most prevalent issues seen in their respective practice. The vignettes gave sufficient information and background of the case, so that participants could have identified multiple issues existing in the patient's life. Only the biological, psychological and social/relational issues were present in each of the clinical case vignettes. Because the "spiritual" component of the Biopsychosocial Model was not

applied until recent years, this aspect of a patient's health was not be analyzed from the survey vignettes.

The rationale for using a clinical vignette format was derived from past studies which have shown that the analog vignette methodology works well with therapist participants (Hansen, 1997; Dersch, 2002; Springer, 2011). Dersch identified the use of clinical vignettes as having important implications regarding the attitudes on domestic violence. Springer and Harris used a clinical vignette to assess for therapists attitudes regarding interventions that were important in therapy and beliefs about medication referrals. This methodology is beneficial because participants are blind to the study, allowing for more valid responses to the cases.

After reading each case vignette, participants answered two open-ended questions and one closed-ended question. These questions are designed to assess: whether participants accurately identified a biological, psychological and social issue, what appropriate referrals would be made based on the information, and the level of comfort in working with this patient or family. These questions are stated as:

- What are the most clinical significant issues to address in this scenario?
- What actions or interventions might you take with this patient moving forward?
- How comfortable would you be working with this patient and/or family?

The author chose to keep these questions vague to avoid any misleading information regarding the content of the vignettes. In the first question, participants gave a brief answer to each of their three most significant issues in the case. Each answer will be limited to a maximum of 150 characters. The author assumed that participants would be

able to identify a biological, psychological and social problem that is embedded in the vignette. For the second question, participants had the opportunity to formulate their treatment plan and recommendations for that case. The author assumed for this question that participants would make a referral based on an issue that is outside of the therapist's scope of practice. The third question was formed on a 1-4 likert scale ("1"= Not Comfortable, "4"=Very Comfortable). This question assessed the degree of comfort that the therapist would feel in treating this client in their clinical practice. Once the participants completed the questions pertaining to a vignette, they could return to that section to change any of their answers. Questions one and two were coded into "yes/no" categories based on key words or phrases of participants' responses.

Coding Procedures. On the first set of questions (demographic and background information), the author coded several variables. For the question on race/ethnicity, the author divided this question into two responses (Caucasian and non-Caucasian). This was conducted so that the confidentiality of participants with a low response rate in minority groups would be protected. For question #6 regarding years of experience, the author organized responses into five categories: (1) 0-2 years, (2) 3-5 years, (3) 6-10 years, (4) 11-20 years, (5) 21 or more years.

For questions #9 and #10, the "yes/no" responses for each course were constructed on a likert scale from 1-6, based on number courses taken in both training and practicum (e.g., "1"= one course taken, "6"= six courses taken). These scales were constructed as predictor variables when used for logistic regression analysis. The author found that there was a wide range of variability in participants' answers to these two questions.

Validity. Several measures were taken to ensure the validity of the stimulus vignettes. First, the author constructed the case vignettes based on information from the Doherty and Simmons study on clinical practice patterns of MFTs (1996). To ensure the construct and face validity of these vignettes, several clinical professionals were asked to analyze the vignette for accuracy and feasibility in the study. The author chose three professionals who have experience in the field of Medical Family Therapy, and are current faculty or a clinician in a medical related specialty (family medicine, primary care, integrative care). These professionals agreed that each vignette appropriately represented how clients present with a variety of concerns that fit under the theoretical umbrella of the biopsychosocial-spiritual model. Additional criteria for these reviewers were: (1) a licensed marriage and family therapist, (2) an AAMFT approved clinical supervisor, (3) a member of either CFHA or the Society of Behavioral Medicine, and (4) a minimum three years clinical training or practice as a medical family therapist. If the majority of reviewers (3 or more) felt that a case vignette needs substantial changes, the author made the necessary revisions and sent back to the reviewers for a follow-up analysis.

Before the author posted the study for participant enrollment, the author sent a version of the survey to five MFT colleagues (4 LMFTs and 1 LAMFT). There were several purposes for testing this survey first before launching it publically. For one, the author wanted feedback on the clarity and flow of the survey. It was important that the survey was user friendly for participants and the construction of all sections made sense. Next, the author wanted feedback on the content of the vignettes and survey questions. The wording and phrasing of terms in the case vignettes should have been clear and

concise for all participants to follow. Finally, the author hoped to get feedback from colleagues on whether the questions of the vignette were either too misleading or too obvious for participants to answer.

There were two main areas of the survey where colleagues gave feedback during the pilot testing stage. First, the format of the introduction to the survey and the spacing between survey questions needed to be adjusted. Respondents noted that certain questions in the demographic and background section should add an "other" category. One respondent was currently working in a mental health setting (Question #7) that was not listed for that question. Two respondents used a theoretical approach (Question #8) different than the options given in the survey. The author implemented these changes prior to the start of study enrollment.

Second, respondents gave feedback regarding the length of the clinical case vignettes. Four of the five respondents noted that the clinical case vignette could have been shortened in length. Additionally, respondents wanted to see more background information about the client and the family issues presented in the case. All respondents were able to finish the survey in less than 30 minutes. The author incorporated this feedback into the background information of the cases.

Statistical Analysis

Descriptive statistics were used to calculate totals and percentages of participants' demographic information. The variables used in this calculation included gender, race, clinical setting, years of experience, and highest degree earned. Frequencies were calculated on all categorical variables. This was a necessary first part of the analytic

process and helped to normalize the distribution of each variable (Mertler & Vannatta, 2005).

A series of chi square tests were used to compare categorical variables in the study to the outcome variables in the clinical cases. The study sample was large enough where these series of analyses could be conducted. On one tabulation, the categorical variables which were included in these analyses were taken from question #7 of the survey, regarding the primary setting where MedFTs practice. Additionally, a series of t-tests were conducted to compare continuous variables in the survey to the outcome variables in the clinical cases. Questions #7 and #9 in the survey served as the predictor variables in these analyses.

Logistic Regression was used to analyze the data in the study. The goal using this method was to find the best fitting and most parsimonious, yet reasonable model to describe a relationship between an outcome variable and a set of independent variables (Hosmer & Lemeshow, 2000). Logistic regression is the best choice when one wants to predict a dichotomous variable based on categorical and/or continuous variables. Additionally, odds ratios enable researchers to examine the effects of other variables on the relationship between two binary (yes/no) variables, using logistic regression (Bland & Ultman, 2000).

Logistic regression was also a good analytical fit because of the construct of the dependent variables in this study. The first question asked whether participants correctly identify a medical, psychological and social/family issue in each vignette. This variable was coded categorically, with a score of "one" if the participant correctly identifies all three clinical issues from the vignette, and "zero" if they did not. The second question

asked what steps participants would make in the treatment process of this client. The author looked for participants to make a referral based on the medical condition of the client in the vignette. Therapists who made the appropriate medical referral will receive a "one," and a "zero" if they do not.

Statistical Hypotheses. The author employed the following statistical analyses for the study's hypotheses prior to running the logistical regressions:

1. MedFTs who worked in medically-based settings were more likely to assess a biological, psychological and social issue in all three clinical cases. Chi-square tests examined whether there was a statistically significant relationship between participants correctly identifying all clinical case issues (yes/no) and the placements settings of MedFTs in medical versus non-medical settings (categorical).
2. MedFTs who worked in medically-based settings were more likely to make a successful referral for treatment of the patient's care in all three clinical cases. Chi-square tests examined whether there was a statistically significant relationship between participants successfully collaborating in all clinical case issues (yes/no) and the placements settings of MedFTs in medical versus non-medical settings (categorical).
3. MedFTs who had greater years of clinical experience were more likely to identify a medical, psychological and social issue in the clinical cases than those with fewer years of clinical experience. Independent t-tests were used to test this hypothesis.

4. MedFTs who had greater years of clinical experience were more likely to successfully make a collaborative referral in the clinical cases than those with fewer years of clinical experience. Independent t-tests were used to test this hypothesis.
5. MedFTs who took more courses in their graduate training had a greater likelihood of correctly identifying all three clinical issues in the three clinical cases compared to those who took fewer courses. Chi-square analyses conducted to test this hypothesis.
6. MedFTs who took more courses in their graduate training had a greater likelihood of making a referral for treatment in all three clinical cases compared to those who took fewer courses. Chi square analyses were conducted to test this hypothesis.

Chapter Four

Results

The purpose of this study was to assess the clinical practices of clinicians who consider themselves Medical Family Therapists. Research questions aimed to look at whether participants successfully identified biopsychosocial issues in clinical cases and whether they chose to make a referral with other healthcare professionals when a course of action was necessary. Little research exists regarding the practices of therapists who work in medically-based settings and their integration of the biopsychosocial approach in their treatment. Previous research (Doherty & Simmons, 1996) looked at the clinical competencies of Marriage and Family Therapists in a variety of clinical practices, with some attention to those who worked with medical issues of patients. This study expanded the analysis of mental health professionals who work with medical issues, including Medical Doctors, Psychologists, Social Workers and Licensed Professional Clinical Counselors to take part in this study.

Sample

Two types of strategies for participant recruitment were used. First, a four stage approach to recruitment was used, following the concepts of the Dillman (2000) model. In the first stage, a pre-notice email was sent out to prospective participants, introducing the study and clarifying information on participant eligibility. Four hundred faculty directors and 86 clinicians in six mental health professions (MFT, Social Work, Psychology, Psychiatric Nursing, Psychiatry and Counseling) received a pre-notice study email, describing the study and that they would receive a link to the survey in the upcoming email. Additionally, this pre-notice email was sent to medical and

collaborative care websites such as the Collaborative Family Healthcare Association, Medical Family Therapy Facebook Page, the International Association of Family Therapy, the Society of Behavioral Medicine and the Primary Care Forum on LinkedIn. After the initial email was sent, 12 emails were returned with an expired account and four individuals asked to be taken off the list.

After removing invalid email accounts and individuals who wished to be removed, 470 prospective participants received the second email for recruitment. Within the first two weeks, 28 participants consented to take part in the study (6% response rate). The author determined that a third email should be sent to individuals, as a reminder that the study was open for participation. One week later, a third follow-up email was sent out to the same participants who received the "invitation to participate" email. Over the next three weeks, 52 participants consented to participate in the study. The overall response rate up to this point was 15%. The author decided not to use a fourth email in the recruitment strategy for the study. The reason for this was to avoid possible coercion of participants being forced to participate in the study. Because the sample size was not determined to be sufficient for statistical power, the author decided to use a second study recruitment approach in order to reach an acceptable sample size.

The second approach used to recruit more participants was a snowball sampling method. After exhaustion of three steps of the Dillman method of recruitment (80 participants), the author contacted individuals on social media sites such as the Medical Family Therapy Facebook page, Primary Care Forum, The LinkedIn AAMFT member group, and the LinkedIn IFTA member group. These contacts were asked to post information about the study to any prospective participants who meet criteria eligibility.

After the author allowed two weeks of additional recruitment from this snowball method, five additional participants took part in the study. When the author closed enrollment for the survey, a total of 85 participants consented to the study (18% response rate).

The snowball sampling method is particularly effective in locating members of special populations where the focus of the study is on a specialized issue (Hendricks & Blanken, 1992). In the case of social media, the internet opens up new ways to investigate social and behavioral science topics because there are many scientific questions about a target population that do not look for generalized results, but representative ones (Fricker & Schonlau, 2002; Baltar & Brunet, 2012).

After study enrollment closed, 85 participants had given their consent to take the survey. After viewing the initial data, one participant was removed due to not providing enough information (only answering the first two questions of the survey). After deletion of this participant, 84 participants were included in the final analyses of the data. Seventy-two participants answered all demographic questions (Part I) of the survey, with some choosing not to answer questions to the clinical cases (Part II). Sixty-eight participants (80%) completed the questions to the first clinical case, 66 participants (78%) completed the questions to the second clinical case and 59 participants (69%) completed the questions to the third clinical case.

A mixed-methods approach was performed in the analysis of the data. Descriptive statistics reported frequencies of participants' demographic information, including gender, race, education, work setting and theoretical orientation. Next, a series of chi-square analyses and t-tests were performed to determine whether the sample differed across certain demographic variables. The chi-square analyses were performed

because there was a sufficient sample size to determine differences amongst sample groups. Additionally, the chi-square analysis compared the proportions or frequencies of categorical data, used as independent variables in the study. Independent t-tests compared the mean differences between the variables of interest in the study. Logistic regression was used to predict the likelihood that participants would successfully identify a biological, psychological and social issue in each of the three case vignettes. Additionally, the author used several predictor variables to determine whether participants successfully recommended making a referral for treatment after reading the initial case scenario information.

Quantitative Analyses

Overall, 80 % (n=64) of the sample were female. A total of 72 participants in the study reported as Caucasian (88.9%). The rest of participants reported race/ethnicity as African-American (2.4%), Asian-American (1.2%), Hispanic-American (4.9%), Native-American (1.2%), and other (1.2%). Three participants were missing from the data regarding race/ethnicity and four participants were missing from the data on gender. The vast majority of participants reached the highest level of education being either a masters level (n=32) or doctoral level (n=45). One participant reported being a medical doctor and five participants listed their highest education as "other." The responses under the "other" category included: "ABD," "Currently in 3rd year PhD," "Doctoral Candidate," "EdD," and "MS/MBA."

A majority of participants (n=76) have practiced as a therapist for at least three years. The highest reported range of years practiced was "6-10 years" (n=24). Almost an equal number of participants reported their primary work location was in a medical or

hospital based setting (n= 40) versus a non-medical or hospital-based setting (n=41). The most frequently reported non-medical based setting was in "education" where 19 participants (22.4%) were primarily working at the time of the study.

The author chose to investigate the theoretical orientations of MedFTs in their current practice. Eighty participants answered this question, with four missing participants. The highest reported orientations were Systems (n=33), Cognitive Behavioral (n=20), Narrative (n=10), Eclectic/Experiential (n=8) and Psychodynamic (n=1). Several participants listed a secondary theoretical approach in the "other" category. The most common theories included in this category were "Bowen theory (n=1)", "Integrative approach (n=1)", and "Solution-focused (n=6)." These descriptive statistics can be found on Table 1.

Table 1*: Demographic Information of Study Participants*

Variable	Number	Percent
Gender		
Male	16	20
Female	64	80
Race		
Caucasian	72	88.9
African American	2	2.4
Asian American	1	1.2
Hispanic American	4	4.9
Native American	1	1.2
Other	1	1.2
Highest Degree Earned		
Master's	32	38.5
Ph.D.	45	54.2
M.D.	1	1.2
Other	5	6.0
Years of Practice		
0-2 Years	4	5.0
3-5 years	20	25.0

6-10 Years	24	30.0
11-20 Years	18	22.5
21-35 Years	14	17.5
Primary Work Setting		
Private Practice	10	12.3
Community Agency	4	5.8
Medical Setting/Hospital	40	49.3
Non-Profit Organization	5	6.1
Education	19	23.4
Other	3	3.7
Theoretical Orientation		
Cognitive Behavioral	20	25.0
Eclectic/Experiential	8	10.0
Psychodynamic	1	1.2
Narrative	10	12.5
Systems	33	41.2
Other	8	10.0

Frequencies were performed on the number of participants who correctly identified three biopsychosocial issues and made a referral for treatment in all three clinical cases (which served as the dependent variables in the study). For clinical case one, 28 out of 68 participants (41.2%) successfully identified all three issues, and 51 out of 68 participants (75%) successfully made a referral for treatment with another individual for the patient's care. For clinical case two, 36 out of 64 participants (56.3%) correctly identified all three biopsychosocial issues and 39 out of 64 participants (60.9%) successfully made a referral for treatment with another individual. For clinical case three, 26 out of 58 participants (44.8%) successfully identified all three issues and 49 out of 55 participants (89.1%) successfully made a referral for treatment with another individual.

Additionally, the author categorized participants who fell into the "yes" category (indicating that participants successfully identified all three biopsychosocial issues and

made a referral for treatment) across all three clinical cases for question #1 and #2 in the study survey. The author only included participants in the analyses who gave an answer to both questions in all three clinical cases. Overall, 11 out of 58 participants (18.9%) for question #1 successfully identified all three issues across all three clinical cases. Furthermore, 31 out of 55 participants (56.3%) for question #2 successfully made a collaborative referral across all three clinical cases.

Preliminary analysis of hypotheses. Prior to running the logistic regression on the data from the study, t-test and chi-square analyses were performed based on the study's initial hypotheses. By running these analyses, this ensured that the predictor variables associated with the author's hypothesis had statistically significant findings. Question #7 in the survey (Which option below best describes your primary work setting?) served as the categorical predictor variable for Hypotheses #1 and #2. Question #6 (How many years have you been practicing therapy) and #9 (Please check if you took coursework in the following areas) served at the continuous predictor variables for Hypotheses #3-#6. The following sections report the chi-square and t-test results for each of the study's hypotheses.

Hypothesis 1: MedFTs who worked in medically-based settings were more likely to assess a biological, psychological and social issue in all three clinical cases.

A chi-square analysis was conducted to determine whether Medical Family Therapists who worked in medically based settings (versus non-medically based settings) affected their ability to assess for a biological, psychological and social issue correctly in each of the three clinical cases. All assumptions for the analysis were checked and met. A Pearson Chi-square test was used because the analysis required a relatively large

sample and there was a relatively even split amongst participants regarding their primary employment (medical versus non-medical). The results of the chi-square revealed no significant differences between the two groups for clinical case #1 (X^2=0.41, *df*=1, *N*=68, *p*>NS), clinical case #2 (X^2=.080, *df*=1, *N*=64, *p*>NS), or clinical case #3 (X^2=.279, *df*=1, *N*=58, *p*>NS).

Hypothesis #2: MedFTs who worked in medically-based settings were more likely to make a successful referral for treatment of the patient's care in all three clinical cases.

A chi-square analysis was performed to determine whether there was a significant difference between those Medical Family Therapists working in medical settings (versus non-medical settings) and successfully making a referral for treatment in the patient's care in each of the three clinical cases. All assumptions were checked and met for the analysis. Overall, the results showed no statistically significant relationships between the two groups for clinical case #1 (X^2=.020, *df*=1, *N*=68, *p*>NS), clinical case #2 (X^2=.066, *df*=1, *N*=64, *p*>NS), or clinical case #3 (X^2=.002, *df*=1, *N*=55, *p*>NS).

Hypothesis #3: MedFTs who had greater years of clinical experience were more likely to identify a medical, psychological and social issue in the clinical cases than those with fewer years of clinical experience.

First, the author ran frequencies to determine that range, mean, mode and standard deviation for the question, "How many years have you been practicing clinically?" Results revealed that the number of years practiced ranged from 1 year to 35 years. The mean amount of years practicing therapy was 11.92, and a standard deviation of 8.9 years. The most frequent number of years reported by participants (n=8 for each group)

were "five years," "six years" and "ten years." The author determined that the range and standard deviation were appropriate to use in conducting further analyses.

Next, the author conducted a t-test to determine whether there was a significant difference between years of clinical experience and those who correctly identified biopsychosocial issues in all three clinical cases. The "yes" category reported a mean score for years practiced of 12.45, whereas the "no" category reported a mean score of 11.59. Results from the analysis showed that there was no significant difference between years practiced and correctly identifying a biopsychosocial issue in all three cases, $t(-.296) = 58$, $p >$ NS.

Hypothesis #4: MedFTs who had greater years of clinical experience were more likely to successfully make a collaborative referral in the case vignettes than those with fewer years of clinical experience.

To determine whether years of experience was significantly different based on whether participants made a referral for treatment across all three cases, a t-test was performed. Participants who successfully made a referral for treatment on all three clinical cases ("yes" category) reported a mean score of 11.90, while participants who did not refer across all three clinical cases ("no" category) reported a mean score of 11.52. Overall, the results from the t-test showed that there was no statistically significant difference between the years of practice and whether participants referred across all three clinical cases, $t(-1.64) = 56$, $p >$NS.

Hypothesis #5: MedFTs who took more courses in their graduate training had a greater likelihood of correctly identifying all three clinical issues in the three clinical cases compared to those who took fewer courses.

An independent t-test was used to analyze the differences between participants' MedFT-related courses in their graduate program and identifying the biopsychosocial issues in all three clinical cases. More specifically, the author wanted to assess for any statistical significance between the mean scores of courses for those in the "yes" and "no categories in identifying biopsychosocial issues in all three clinical cases. The "yes" category had a mean course score of 3.90, whereas the "no" category had a mean courses score of 3.62. The results from the t-test showed that there were no significant differences between the number of courses MedFTs took in training and whether they correctly identified biopsychosocial issues in all three clinical cases, $t(-.595) = 57$, $p >$ NS.

Hypothesis #6: MedFTs who took more courses in their graduate training had a greater likelihood of making a referral for treatment in all three clinical cases compared to those who took fewer courses.

An independent t-test was used to analyze the hypothesis, comparing the number of courses taken in one's graduate program with whether participants made a referral for treatment in all three clinical cases. Assumptions were made that the variances for the dependent variable in the two populations were equal and that the dependent variable was normally distributed within each population. The "yes" category for participants who successfully made a referral for treatment in all three clinical cases had a mean course score of 4.03, while the "no" category had a mean course score of 3.22. The results showed that there was a statistically significant difference in the amount of courses taken by participants who fell in the "yes" and "no" categories in making a collaborative referral, $t(-2.249)= 55$, $p < .05$. Participants who made a referral for treatment in all three

clinical cases reported taking more coursework (e.g. medical/health, psychopharmacology) in their graduate training.

Coding of variables. Participants were asked to complete two open ended questions regarding both biopsychosocial assessment issues referral for treatment of the three clinical cases. The author categorized responses for both questions into "yes" and "no" categories based on whether or not participants correctly gave the right answer for each case. The author used a coding system for the logistic regression based on previous studies (Dersch, 2002; Springer, 2010), where MFTs reported answers based on sample clinical cases. The author's standard for a correct answer to question one was that participants must have reported a biological issue, psychological issue and social issue that matched the content in the clinical cases. Additionally, the standard for a correct answer to question two was that participants must have made at least one type of referral, whether this was in a medical, mental health, or social/community capacity.

For question one (What are the three most significant issues presented in this case?), the author coded each participant on whether they identified the correct biological, psychological and social issue for each case. For case one, participants must have responded with Diabetes (medical issue), depression (psychological issue) and parental boundaries or school issues (social issue) to receive a score of "1." For case two, participants must have responded with G.I. Problems (medical issue), anxiety (psychological issue), and enmeshment with parents or spiritual beliefs of medication (social issue) to receive a score of "1." For case three, participants must have responded with chronic pain (medical issue), prescription drug abuse (psychological issue), and living situation or family resources (social issue) to receive a score of "1." If two

problems were reported under one answer (e.g., Diabetes and depression were both filled in the first box for clinical case #1), the author determined that the participant got both areas correct and were still eligible to receive a "1". Any incorrect or blank responses reported by participants on any of the three clinical cases received a score of "0."

For question two (What actions or interventions might you take with this client moving forward?), the author used the same coding system for "yes" and "no" categories. If a participant reported a medical, mental health or social referral, they received a "1" and a "0" if no referral for treatment was made. The participant only needed to make one referral for treatment (i.e. medical, mental health or social) for them to be grouped in the "yes" category. The author created a set of key words to determine whether a referral for treatment was successfully made by the participant. These words included, "referral", "consult", "collaboration", "communicate" "release of information" or "speak to."

Logistic regression analyses. The author conducted six logistic regression models in the study (Tables 2-7). In each model, the predictor variables remained the same. The results will be reported based on odds ratios and statistically significant findings. Tables two, three and four assessed for the odds that each predictor variable determined the likelihood of either "yes" or "no" responses for participants assessing all three biopsychosocial issues in the clinical cases. Tables 5, 6 and 7 assessed for the odds that each predictor variable would determine either "yes" or "no" responses for participants who made a referral for treatment in the clinical cases. Odds ratios have become widely used in medical data for several reasons. They enable researchers to examine the effects of other variables on that relationship, using logistic regression.

Additionally, it is a special and convenient interpretation in case-controlled studies (Bland & Altman, 2000).

The first regression (see Table 2) looked at which variables of participants' practices, background and employment predicted the likelihood of making a biopsychosocial assessment for clinical case one. The results showed two statistically significant findings from the analysis. First, "years of clinical practice" was significant at the .05 level (p=.032). Because the odds ratio number was < 1.00 (.795), this score indicated that participants with more years of clinical practice had a lower likelihood of correctly making a biopsychosocial assessment for clinical case one. Second, the variable "topics covered in practicum" (re-coded on a 1-6 scale) was statistically significant at the .05 level (p=.018). This result showed that those who had more topics covered in their practicum training had a lower likelihood of making a biopsychosocial assessment for clinical case one.

Table 2: *Logistic Regression: Successfully Identifying Biopsychosocial Issues in Case One*

Variable	*B*	*S.E.*	*Wald*	*D.F.*	*p*	*Odds Ratio*
Years of Clinical Practice	-.229	.107	4.588	1	.032*	.795
Current Practice Setting	.003	.582	.000	1	.996	.997
Courses Taken in Training	.186	.222	.705	1	.401	1.205
Topics Covered in Practicum	-.492	.209	5.554	1	.018*	.611
Relational issues at intake	.797	1.258	.401	1	.526	2.219
Medical issues at intake	-1.919	.999	3.690	1	.055	.147
Release of information at intake	.405	.327	1.537	1	.215	1.500

The second regression analysis for question two (Table 3) looked at which variables predicted the likelihood of making a biopsychosocial assessment for clinical case two. In this block, no variables were statistically significant at the .05 level. Thus,

none of the predictor variables in this logistic regression analysis were associated with the likelihood of identifying a biological, psychological and social topic in this clinical case.

Table 3: *Logistic Regression: Successfully Identifying Biopsychosocial Issues in Case Two*

Variable	*B*	*S.E.*	*Wald*	*D.F.*	*p*	*Odds Ratio*
Years of Clinical Practice	-.020	.083	.058	1	.809	.980
Current Practice Setting	.137	.541	.064	1	.801	1.146
Courses Taken in Training	.101	.193	.274	1	.600	1.107
Topics Covered in Practicum	-.054	.186	.083	1	.773	.948
Relational issues at intake	2.165	1.509	2.060	1	.151	8.719
Medical issues at intake	-1.495	1.156	1.674	1	.196	.224
Release of information at intake	-.026	.301	.007	1	.932	.975

The third logistic regression analysis for question one (Table 4) looked at the variables that predicted the likelihood of making a biopsychosocial assessment for clinical case three. In this block, there were two statistically significant findings from the analysis. First, "years of practice" was statistically significant at the .05 level (p=.017). This result indicated that participants with more years of clinical practice had a lower likelihood of making a biopsychosocial assessment for clinical case three. Second, "release of information at intake" was statistically significant at the .05 level (p=.013). This variable was a likert scale (1-4) question, assessing the probability that participants get a release of information at an intake session from a patient. This result indicated that participants who were more likely to get a release of information at an intake session had a lower likelihood of making a biopsychosocial assessment for clinical case three.

Table 4*: Logistic Regression: Successfully Identifying Biopsychosocial Issues in Case Three*

Variable	*B*	*S.E.*	*Wald*	*D.F.*	*p*	*Odds Ratio*
Years of Clinical Practice	-.462	.194	5.680	1	.017*	.630
Current Practice Setting	-.454	.651	.487	1	.485	.635
Courses Taken in Training	-.153	.221	.481	1	.488	.858
Topics Covered in Practicum	.466	.247	3.570	1	.059	1.593
Relational issues at intake	-.719	1.500	.230	1	.632	.487
Medical issues at intake	-.970	1.068	.824	1	.364	.379
Release of information at intake	-.926	.371	6.227	1	.013*	.396

The second set of analyses for question two looked at how the independent variables would predict the likelihood of participants making a successful referral for each clinical case (medical, mental health or social). The first regression for this question (Table 5) showed no results significant at the .05 level. Therefore, none of the predictor variables were associated with a greater likelihood of making a successful referral for the patient.

Table 5*: Logistic Regression: Successfully Making a Referral in Case One*

Variable	*B*	*S.E.*	*Wald*	*D.F.*	*p*	*Odds Ratio*
Years of Clinical Practice	-.147	.086	2.920	1	.087	.864
Current Practice Setting	-.03	.596	.004	1	.951	.964
Courses Taken in Training	.104	.216	.233	1	.629	1.110
Topics Covered in Practicum	.063	.194	.105	1	.746	1.065
Relational issues at intake	.090	1.576	.003	1	.955	1.094
Medical issues at intake	-.749	1.161	.416	1	.519	.473
Release of information at intake	-.235	.353	.443	1	.506	.791

The second logistic regression (Table 6) looked at which factors predicted a successful collaboration for clinical case two. The regression for this analysis showed no results that were statistically significant at the .05 level. Therefore, none of the predictor

variables were associated with the likelihood of making a successful referral for the patient in clinical case two.

Table 6*: Logistic Regression: Successfully Making a Referral in Case Two*

Variable	*B*	*S.E.*	*Wald*	*D.F.*	*p*	*Odds Ratio*
Years of Clinical Practice	.019	.084	.050	1	.823	1.019
Current Practice Setting	-.068	.556	.015	1	.902	.934
Courses Taken in Training	.295	.200	2.178	1	.140	1.343
Topics Covered in Practicum	.053	.183	.084	1	.772	1.054
Relational issues at intake	.950	1.364	.485	1	.486	2.586
Medical issues at intake	-.157	.958	.027	1	.870	.855
Release of information at intake	-.022	.310	.005	1	.944	.978

The third logistic regression (Table 7) looked at which factors predicted a successful collaboration for case three. The results showed that no results were statistically significant at the .05 level. Therefore, none of the predictor variables were associated with the likelihood of making a successful referral for the patient in clinical case three.

Table 7*: Logistic Regression: Successfully Making a Referral in Case Three*

Variable	*B*	*S.E.*	*Wald*	*D.F.*	*p*	*Odds Ratio*
Years of Clinical Practice	-.061	.086	.504	1	.478	.941
Current Practice Setting	.451	.963	.220	1	.639	1.570
Courses Taken in Training	.658	.366	3.234	1	.072	1.931
Topics Covered in Practicum	-.093	.282	.108	1	.742	.911
Relational issues at intake	.240	1.927	.016	1	.901	1.271
Medical issues at intake	.727	1.400	.270	1	.604	2.069
Release of information at intake	-1.093	.730	2.241	1	.134	.335

The results from the series of logistic regression analyses showed that there were few independent variables that predicted the likelihood of participants identifying all three issues in each case or making a referral for treatment in each case. The variable "Years of Clinical Practice" showed a statistical significance in case one and three for the first question (Tables 2 and 4), where participants who had more years of experience were less likely to identify all three biopsychosocial issues. Additionally, participants who took more courses in their graduate training were less likely to identify all three biopsychosocial issues in case one (Table 2). Furthermore, participants who were more inclined to get a release of information at the first appointment were less likely to identify all three biopsychosocial issues in case three (Table 4) There were no statically significant variables found when running analyses for question two (Tables 5-7).

Qualitative Analyses

Content Analysis. Participants were asked to respond open-ended to the second question of the survey, "What actions or interventions might you take with this client moving forward?" The author used a content analysis approach to analyze the data for this question. Content analysis is a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use. As a research technique, content analysis provides new insights, increases a researcher's understanding of particular phenomenon and informs practical actions in the data (Krippendorf, 2013). There are several advantages to using content analysis in social science research, including: (1) an easy to develop coding system to use for the study data, (2) while labor intensive, little capital investment or resources are involved, (3) the coding is relatively error free, with flexibility for the researcher to adjust any errors or

mistakes, and it (4) allows the researcher to categorize specific thematical criteria, narrowing down larger themes into smaller, sub-themes (Rosenthal & Rosnow, 1991).

More specifically, the author used an inductive categorical analysis in the interpretation of the data. This approach follows the methods applied from Krippendorf (1980), where a series of steps are used to determine the final themes of the data. A determination of categorical definitions and levels of abstraction were determined based on the overall research question. First, the author developed three guiding categories from the original research question: "Medical Collaboration," "Mental Health Collaboration," "Social/Community Collaboration." The author determined these themes based on the elements of the biopsychosocial approach, which guided the content in the clinical cases. These categories are displayed in order of prevalence based on participant responses. For example, "medical collaboration" is the most frequent category for all three cases, thus is listed first for every case scenario. Next, a step by step formulation of inductive themes was accomplished, where the most prevalent topics were developed based on frequency of responses in the data. The author determined these "inductive themes" under each category based on specific words or phrases in participant responses (e.g., "Referral with PCP" was a general theme under the category of "Medical Collaborations"). After determining each general theme, the author then narrowed down specific "sub-themes" for each clinical case. The author went through several reviews of the themes in the text, discovering emerging trends and text in developing these sub-themes (Table 8).

Table 8*: Content Analysis Categories for all three Clinical Cases*

Open Ended Questions	Categories/Themes/Sub-Themes
<u>Clinical Case #1</u>	
What actions or interventions might you take with this client moving forward?	1. Medical Collaboration -Primary Care Physician ▪ Diabetes Care

	▪ Consult first before therapy - Nutritionist ▪ Dietary Treatment Plan 2. Mental Health Collaboration -Support Groups 3. Social/Community Collaboration -School Counselor
<u>Clinical Case #2</u> What actions or interventions might you take with this client moving forward?	1. Medical Collaboration -Physician/Medical Doctor completing a physical Evaluation - Medical Team ▪ Inclusion of John's mother in medical meetings or treatment 2. Mental Health Collaboration -Anxiety Medications 3. Social/Community Collaboration - None Indicated
<u>Clinical Case #3</u> What actions or interventions might you take with this client moving forward?	1. Medical Collaboration - Primary Care Physician - Pain Management Specialist 2. Mental Health Collaboration - Social Worker -Group Therapy ▪ Support group for chemical dependency -Medication/Psychiatrist 3. Social/Community Collaboration - Community Collaborations ▪ Resources/Social Services ▪ CPS - Housing - Financial Issues

There were several biases that the researcher addressed when he proposed this open-ended question for the study. First, the author assumed that most participants would make a referral or proposed consultation with another professional, based on the wording of the question. Because Medical Family Therapists work from a systemic approach to patient care, it was anticipated that most participants would have been able to identify issues that warranted further collaboration. Second, the construction of the clinical cases was influenced by the previous clinical and research experiences of the author. Even though the content of the three clinical cases demonstrated clear medical, psychological and social issues, some participants may not have had previous experience or exposure to some of these issues in their MedFT practice. Finally, because most participants have taken previous coursework in medical and clinical topics in their graduate training, it was assumed that collaboration with providers would be a particularly strong topic of knowledge, considering many MedFTs resonate with a systemic perspective of patient care.

To ensure the internal validity of the content analysis, the author consulted with an internal auditor (dissertation advisor) for this study. The internal auditor used a contextual approach in analyzing the data, using inductive methods to categorize themes. This approach offered a clear series of steps for inductive analyses, allowing categories and themes to emerge from the data. Data from participant responses to the open ended questions were aggregated into three separate databases each representing a different vignette from the study. The internal auditor followed this inductive data analysis procedure, where the data were allowed to "speak to" the auditor during and after multiple reviews of the data. An initial review of the data resulted in the auditor taking

notes on prevalent themes from participant responses to each vignette. Main coding categories were determined by the auditor's overall impression of prevalence. A second review, by the internal auditor, resulted in coding categories being more clearly defined in a process where main themes were strengthened and sub-themes were introduced and clarified. A third review revealed no additional coding categories emerging from the data. Data analysis ended when the auditor reached a point of saturation with the data (Lofland et al. 1995; Patton, 2002). The results of the internal audit process are presented in Table 9.

Table 9*: Developmental Research Sequence (Internal Auditor)*

Open Ended Questions	Categories/Themes/Sub-Themes
Clinical Case #1 What actions of interventions might you take with this client moving forward?	1. "Get a Release" -To discuss case with PCP/ family doctor 2. Referrals (order of prevalence) -PCP - Nutritionist/Dietician - School Counselor - Community Agency 3. Treat Grace for Depression/Mood Diagnosis 4. Family Therapy to help family and Grace 5. Collaborate with Grace to foster buy-in - What does she see the problem is? - How does she want to approach treatment?
Clinical Case #2 What actions or interventions might you take with this client moving forward	1. Treat John for Anxiety 2. Medical Referral- to rule out GI -Comorbidity with anxiety symptoms 3. Family Therapy -Work on differentiation for John -Boundaries/Launching

	-Confront/ Investigate restrictive/irrational family beliefs around medical treatment 4. Relaxation Exercises for Anxiety -Breathing exercises & mindfulness techniques
Clinical Case #3 What actions or interventions might you take with this client moving forward?	1. Referral to Social Worker or community resources - Housing - Employment - Food & Financial 2. Medical Referral - Pain Management/Pain Clinic ▪ Education on chronic pain (how meds can help or not) 3. Assessment of Drug Use - Rule out dependence on Vicodin 4. Contact Child Protection Services - Ensure safety of the children

Case #1. Case one described an adolescent (Grace) who was experiencing several physical symptoms which warranted a possible diagnosis of Diabetes (medical issue). Grace also exhibited some withdrawal from others, low energy and lack of motivation, which indicated some clear signs of depression (psychological issue). Furthermore, Grace's parents showed some very loose boundaries with Grace, exhibiting a lack of parental control over Grace's actions (social issue). The author constructed this vignette with the assumption that most MedFTs were going to make some type of medical or mental health referral for Grace's health.

Medical Collaboration.

Theme One: Primary Care Physician. All of the participants who recommended some type of collaboration included at least one medical referral to a doctor or physician. The most common provider referenced under this category was the primary care physician of the patient. Overall, a total of 16 participants reported a referral which included either "*PCP*" or "*primary care doctor*." Specific responses included "*Consult with PCP about specific health concerns*" (participant 42), "*Collaborate and coordinate with PCP about treatment plan*" (participant 5), and "*Consult with PCP about medical concerns*" (participant 63).

A sub-theme which the author discovered was the specific need for *Diabetes care* from either a PCP or medical doctor. Participants were concerned that there were co-morbid issues existing with the possibility of Diabetes. A specific quote from this sub-theme was, "*I would want her to be screened for Diabetes first of all and then go from there*" (participant 30). An additional sub-theme was the need to *consult with a PCP or doctor* first before moving ahead with interventions or treatment. Many participants in this category were hoping that the referring MD could "*mitigate*" or "*stabilize*" any medical issues that were persisting for the patient.

Theme two: Nutritionist. Several participants mentioned the need to collaborate with a Nutritionist for care of the patient's medical issues. A total of five participants used the word "*nutritionist*" or "*nutrition referral*" in their open-ended response to the question. Most of the responses in this category referred to the participant wanting to work with the patient's physician along with a Nutritionist for appropriate management of care. Some examples of this category included "*I would likely refer her to a nutritionist consult*" (participant 21), and "*Work directly with the patient's medical*

providers and have a team meeting with the family and a nutritionist if available" (participant 68).

A sub-theme that emerged from this theme pertained to Grace's need for a *dietary treatment plan*. It didn't appear that participants were concerned with Grace's challenges with obesity, as much as Grace becoming an active agent in her own healthcare. A few participant quotes from this sub-theme included, "*I would likely refer her to a nutrition consult and then use recommendations for a healthier eating plan*," (participant 24), and "*Collaboration with nutritionist to help the family learn more about health and medical management*," (participant 45). In these instances, nutrition was seen more as an overarching referral for the patient's entire health status, and not just a specific medical or physician issue.

Mental Health Collaboration.

Support Groups. A small number of participants (n=6) decided to make a mental health referral or consult based on the information from the clinical case. The most common response in this category was the recommendation of a support group for the patient. The two main responses under this collaboration were for a social skills group and a teen support group (e.g., "*referral for a teen support group*", participant 64). Mental health collaboration was the lowest reported category of responses in the first vignette. The author did not see any sub-themes emerge based on multiple times reviewing the themes in the data.

Social/ Community Consultation.

School Counselor/Professional. Several participants recommended a referral with an individual or provider outside of the medical and mental health contexts. The most

frequent professional that was mentioned under this category was a school counselor. Eight participants mentioned the need to collaborate with a school counselor or school personnel to address the underlying psychosocial needs of the patient. These phrases included "*Release of information to speak with Grace's school counselor*" (participant 39), and "*Get release from school to talk about academic supports and identify exceptions*" (participant 60). After exhausting the analysis of content in this theme, no further sub-themes emerged from the data.

Case #1 Internal Audit Results. Overall, the internal auditor saw several categories emerge from the inductive analysis process. Primarily, "*getting a release of information to speak with a PCP, Medical Doctor, Nutritionist or Dietician*" was very common amongst participant responses. The auditor ranked ordered the prevalence of referrals that participants reported in this theme (PCP, Nutritionist, School counselor, Community Agency). Additionally, the auditor found that "*treating Grace's depression and mood disorder"* was a theme that started to emerge as the inductive process evolved. There were several theoretical approaches which participants appeared to report in treating Grace's mood (e.g., Motivational Interviewing, Psychoeducation), in addition to the need for family therapy for the patient. Finally, the auditor noted that the "*buy-in for Grace's health*" appeared consistently when analyzing the data multiple times.

Case #1 Comparisons between Author's and Auditor's Results. There were several topics where the author and auditor were in agreement during the analytical process. Among these, both individuals noted that the release of information to speak with a medical provider was a strong theme that persisted throughout the data. Additionally, the collaboration with a school counselor was picked up in both analyses,

where the author focused on prevalence of the school counselor referral, while the auditor noticed this school counselor as one of many referrals for Grace's overall care. One difference noted in analysis comparison pertained to the theoretical approaches taken by participants in the care of Grace. Where the auditor discovered the contextual descriptions of theory in the data, the author did not consider this issue to be a main theme because this was not an actual referral topic. Furthermore, the auditor was able to identify "*Grace's buy-in and personal agency of health*" as an important issue that emerged; an area that was not seen in the content analysis of the author.

Case #2. Case #2 described a patient (John) who presented with apparent gastrointestinal problems and stomach ailments (medical issue). John was experiencing some noticeable symptoms of anxiety and panic in the session (psychological issue). Additionally, John was very enmeshed with his mother, where both members had certain spiritual stances on medication use (social issue). Overall, 39 out of 69 participants (60%) recommended some type of referral in one of the three categories for this case vignette. The specific categories and themes are highlighted below.

Medical Collaboration.

Theme One: Physician/Doctor. Similar to case one, most of the referrals for case two were medical-based. Overall, 20 participants made some type of collaboration with a medical professional. Primary Care Physicians and specialists were the most frequently reported professionals in this category. Some examples addressed in this theme included: "*Suggest initial r/o of IBS or Crohn's through evaluation by PCP, discuss relationships with medical professionals*" (participant 65) and "*Family conference with physician to discuss John's symptoms*" (participant 7).

As the author conducted further analyses, a sub-theme of *complete physical evaluation* started to evolve. Participants were not only concerned about potential G.I issues or stomach complaints reported by John, but wanted to get a further assessment to rule out any other medical or mental health issues that may have been present. Examples of these statements included, "*a complete biopsychosocialspiritual evaluation of John and family*" (participant 38), "*I would have John go through a full medical assessment and rule out what is psychosomatic and actual symptoms to identify if he has a conversion type disorder or not*" (participant 51).

Theme Two: Medical Team. Other participants (n=11), whose responses were in this category, reported that referrals should have been made with multiple providers on the patient's care team. These participants extended the scope of care beyond just one primary care physician. The author coded responses such as "*medical team, medical professionals, medical staff, multidisciplinary collaboration, and healthcare providers*" in this category. Some examples of participant responses included, "*Get a release to speak with medical providers, provide support for John to attend a medical appointment*" (participant 24), "*This case definitely requires multidisciplinary collaboration to determine cause of GI problems*" (participant 45), and "*Consult with primary care team regarding G.I. issues*" (participant 61).

One sub-theme that emerged from the author's analysis was the *inclusion of John's mother in medical meetings or treatment*. Some specific quotes from the data included, "*Family conference with physician to discuss John's symptoms, mother's ideas of medical care, and a plan to diagnose John's bowel/anxiety issues*" (participant 7), and "*Learn more about the role of his mom in healthcare, maybe she will be good person to*

get involved to get him to see an MD" (participant 8). The mother appeared to be a key figure in both getting John to trust his physicians surrounding his health, and to be involved in his medical/mental health care.

Mental Health Collaboration.

Theme One: Anxiety Medications. The patient in case #2 showed some clear symptoms of anxiety disorder. Overall, four of the five participants who made a mental health consultation referred to the need for medication for anxiety. Additionally, four of the five participants who made a mental health referral also made a medical referral. The author chose to condense these responses into one general theme. Some of the examples under this category included, "*The utility of psychiatric medications*" (participant 34), "*Develop a tx plan that may involve psychiatric medication*" (participant 49), and "*Possible pharmacotherapy for anxiety*" (participant 56).

Social/Community Collaboration. After careful analysis, the author did not determine a specific theme under this category due to lack of overall referrals reported by participants. Only one participant chose to make some type of social referral for the patient's treatment.

Results from Internal Auditor. After an inductive analytical process, the auditor reported that anxiety, medical referrals and family therapy appeared to be the major themes which emerged from the data. Under anxiety, the auditor specifically saw somatization symptoms as being connected to the overarching theme of anxiety. Under medical referrals, participants saw Irritable Bowel Syndrome (IBS), GI problems, and co-morbid anxiety issues as common issues to refer this patient. This theme came up both as a common issue to treat the patient and as a medical/mental health referral. Furthermore,

the internal auditor saw family therapy as a common treatment approach for John, specifically addressing differentiation, family boundaries and launching John from his mother. Other secondary themes which emerged included relaxation exercises for anxiety (breathing exercises/mindfulness techniques), CBT for irrational beliefs, medical issues, and John finding his own agency/voice.

Comparisons between the Author's and Auditor's Results. Both the author and auditor saw the medical referral for John and treatment of anxiety as major themes in this clinical case. Where the author saw anxiety medications as being the primary referral reported by participants, the auditor viewed anxiety emerging as a primary mental health issue for the patient. Additionally, both reviewers saw the strong prevalence of medical referrals for John. Because the medical collaboration category was the most frequently reported area, both the author and auditor saw the biomedical needs of the patient appear quite often in the text. Similar to clinical case one, the auditor reported more theoretical approaches (CBT, relaxation techniques, mindfulness) than the author in the content analysis. An additional difference was that the auditor found more family therapy themes emerge from participant responses, an area that was not seen in the frequency of responses from the author.

Case #3. Case three presented a patient (Maria) who was suffering from a biological issue (chronic pain), a psychological issue (prescription drug abuse), and a social issue (lack of resources and cutoff from family). Similar to the other two clinical cases, participants overwhelmingly reported the majority of referrals under the "*medical category*." Of the 46 participants who made some type of referral, 38 participants determined that a medical referral was necessary based on the information given. Sixteen

participants indicated the need for a referral under the "*mental health category*" and 22 participants suggested collaboration in the "*social/community category*." Only six participants recommended collaboration with a provider or individual across all three categories. The following are specific themes reported under each main category for case three.

Medical Collaboration.

Theme One: Physician/Doctor. A total of 21 participants decided to make a referral to a doctor based on the information in clinical case three. The author included words such as "*doctor, physician, PCP, and MD*" to include in this theme. Participants felt that there was enough biomedical information presented with the identified patient (Maria) to consult with these providers. Some statements included "*Collaborate with physician regarding use of narcotics and understand pain source*" (participant 13), "*Release for PCP and other supports, consult with PCP around potential for prescription drug pain med abuse*" (participant 43), and "*Consultation with physician around her chronic pain*" (participant 36).

Theme Two: Pain Management. Several responses were condensed into a theme of *pain management.* Ten participants had reported a referral being made to address pain issues for the patient. Most of these participants had made an additional referral to a doctor or physician, in addition to a provider who specializes in chronic pain. Specific words used to code this theme of medical collaboration included "*pain clinic, pain management, pain specialist, and pain treatment*." Some of the responses under this theme included, "*Referral to pain specialist*" (participant 26), "*Referral to pain clinic for both physical/mental treatment of pain*" (Participant 29), and "*Refer to pain clinic and*

collaborate with medical team to create a plan to determine what to do about back pain" (participant 40).

Mental Health Collaboration.

Theme One: Social Worker. The most common mental health referral for case three was for consultation with a Social Worker for additional treatment and resources for the patient. This case had the most mental health referrals reported by participants (n=24) out of all the cases. This case addressed several psychosocial areas of concern, which participants were able to identify in the text. Out of these 24 referrals, 13 were made to consult with a social worker or in a social work capacity. Participants statements included, "*See if social worker has any additional resources/support*" (participant 15), "*Include Social Worker to make sure that resources are wrapped around*" (participant 38), and "*Refer her to clinical social worker for housing and employment resources*" (participant 1).

Theme Two: Groups. Five participants had stated that they would seek further referrals to have the patient (Maria) find a group therapy or support venue. Interestingly, all five participants who referred for a group also made either a medical or social collaboration as well. Participants noticed that the patient could benefit from these groups to address areas of chronic pain, prescription drug abuse or outside psychosocial support. Some of the participants responses were, "*Refer Maria to a chemical dependency program*" (participant 18) and "*Referral to alanon, and kids to a lateen, refer parent to support group*" (participant 42).

After reviewing the data two more times, the author found a sub-theme of "*support groups for chemical dependency*" as a specific type of mental health referral.

Participants believed that Maria could benefit from group therapy to address possible symptoms of prescription drug abuse, evidenced by the information in the clinical case. Some participant responses included, "*Possibly refer Maria to a Chemical Dependency program for evaluation*" (participant 20), and "*Refer her to pain clinic, group meetings, and possibly outpatient treatment for dependency*" (participant 40).

Social/Community Collaboration.

Theme One: Community Resources. Case three provided more recommendations for referrals or consultations for social/community resources than cases one and two. The author assigned an overall theme "community collaborations" that provided the most referrals for this category (n=16). Within this theme, the author found *resources and social services* as two prevalent sub-themes that appeared in participant responses. Regarding community resources, some participants responded with, "*Utilize community resources for safety issues*" (participant 23), "*Connect Maria with city and charity resources*" (participant 39), and "*Assist in finding financial resources and substance use resources*" (participant 50). Fewer participants reported the need for social services to be involved in the coordination of care for this patient. Two examples of these responses were, "*Hook up with social service resources through care manager*" (participant 13) and "*Contact social services to help children*" (participant 2).

Another sub-theme that appeared during the analysis of this clinical case was the call requests for *child protection services*. Participants felt that the patient (Maria) was neglecting her children, not giving proper living and eating arrangements. Responses either included the acronym "*CPS*," or referred to the need for case workers/managers to assess for safety issues in the family. A few statements on CPS included, "*First I would*

have to establish the safety of her children and file a CPS report if needed" (participant 18), and "*Immediately address family needs and safety and utilize community resources to support this - e.g., if needed CPS*" (participant 24).

Theme Two: Housing. The need for resources around shelter was another theme for that participants made referrals. A total of ten participants made some reference to housing resources/services being made available to the family. Key words highlighted under this theme included *housing resources, affordable housing, shelter, homeless shelter management and stable housing*. Two examples from this category included, "*Case workers, explore options with shelter case worker about additional resources to meet basic needs*" (participant 58) and "*Liase with current agency for housing possibilities* (participant 3)."

Results from internal auditor. The auditor saw four main themes emerge through an inductive process of reviewing the data. Medical referrals, specifically for pain management was the prevailing theme through the text of responses. The referral for a Social Worker was another emerging theme, where specific needs for the patient's overall resources included housing, employment and financial stability. Drug abuse treatment for the patient was a strong trend in the responses regarding mental health issues, with Vicodin abuse being seen often in the responses. Finally, the need for outside help and support (social services, CPS) was noted as a critical resource throughout the context of the data.

Comparisons of the Author's and Auditor's Results. Overall, the author and auditor agreed on the majority of main topics and themes emerging in the data. Both reviewers saw a medical professional, a social worker and a need for drug abuse

treatment as the primary themes that surfaced in the data. Across both analyses, the frequency of referrals and main themes were varied across the biopsychosocial spectrum of the patient. One noticeable difference in the comparisons was while the author noted that group therapy and specific treatment for prescription drug abuse was a common mental health topic, the auditor saw more need for education and general pain management treatment for this issue. The auditor categorized drug abuse treatment as a separate category in the analysis, while the author saw this topic more often under the "*medical collaboration*" category of the data.

Overall Summary. For this content analysis, the author conducted four full reviews of the data in all three clinical cases. In conducting this process, a few impressions from participant responses were discovered. First, medical referrals were the most frequently reported category for all three clinical cases. However, the types of referrals that participants stated were vague, not giving specifics regarding the recommendations of the referral or what the MedFT hoped would happen as a result of referring to medical providers. This trend was consistent with what the author had predicted for question two in the survey, which hypothesized that medical issues (Diabetes, G.I. Disorder, Chronic Pain) would warrant services outside of the scope of practice for mental health professionals. Participants who defined themselves as MedFTs may have assumed that medical professionals were in close collaboration to coordinate services with this patient regarding these medical problems.

Second, most participants appeared confident in treating the psychological issues in all three clinical cases. Even though depression, anxiety and prescription drug misuse are three issues that mental health providers commonly treat in their practice, it was

surprising to see that very few referrals were made for other treatment approaches for these problems. The majority of participants successfully identified the underlying mental health issues of the three patients presented in the clinical cases. Participants frequently referred to a social worker as the main professional who could address other mental health needs outside of general counseling or family therapy.

Chapter Five

Discussion

The purpose of this study was to assess the clinical practices of Medical Family Therapists in their work. The study had two guiding research questions: (1) How likely were MedFTs to use a biopsychosocial approach in assessing the health of clients? and (2) How likely were MedFTs to make a referral for treatment when a course of action was necessary? Little research to date has explored how therapists used this theoretical approach in clinical practice with clients and families who experience mental health and medical issues. Although numerous studies have highlighted the importance of using the biopsychosocial approach (e.g., Boyd et al., 2011; Campbell, 2003; Doherty et al., 1995; Engel, 1977; McDaniel et al., 1992) and collaborative practices in medical settings, this study was the first to assess how MedFTs apply this theory to assessment of a clinical case and determine the necessary referrals with other medical or mental health providers. The following will review the results of the study, the limitations of the study and future directions of research.

This study was the first to assess the clinical practices of Medical Family Therapists using clinical cases in an online survey. Diagnoses in the clinical cases were based off of previous data from the clinical competencies of MFTs in a study by Doherty and Simmons (1996). In this study, 526 therapists from fifteen states gave descriptive information about clinical practice patterns, training and experience in their work. The author gathered descriptive statistics from this study, calculating the three most prevalent medical issues which therapists have worked with in their practice. The validity in using

these medical issues in the survey allowed the author to construct a fair and appropriate series of clinical cases for respondents to answer.

Another highlight from this study was the incorporation of a theoretical model as a guide marker in developing the research questions. The biopsychosocial approach is a recommended model of care for Medical Family Therapists in their practice (McDaniel et al. 1992; McDaniel, 1995). Although therapists who work in medical settings do not need to know the solutions to complex issues, they need to be aware that these issues exist and take into account how the biopsychosocial model can be implemented (Patterson et al., 2002). The author incorporated a biological, psychological and social issue into three complex cases for participants to assess. The study was able to determine the effectiveness of participants who consider themselves MedFTs and whether they implemented this approach in their judgments of clinical cases in the study.

Assessment of Biopsychosocial Issues

The first research question in this study was, "How likely did MedFTs use a biopsychosocial approach in assessing the health of clients?" Overall 41.2% of participants correctly identified all three biopsychosocial issues in case one, 56.3% of participants correctly identified all three biopsychosocial issues in case two and 44.8% of participants correctly identified all three biopsychosocial issues in case three. The author assumed that at least 75% of participants would have correctly identified biopsychosocial issues in all three clinical cases. Additionally, only 18.3% of participants identified each biopsychosocial issue in all three clinical cases. The author found these results to be surprisingly low. Because all three cases gave clear information on a biological,

psychological and social issue, participants who practiced in a "MedFT context" should have identified issues at a higher rate across all three clinical cases.

One explanation for this could be that participants were viewing these clinical cases according to their own professional perspective. For example, a MFT may have assessed for a psychological and social issue, but missed a medical issue because this was not in their scope of practice. Another explanation could have been the lack of depth and background regarding the symptoms of each diagnosis. In a real life clinical situation, participants may have identified these issues more clearly when conducting a longer initial assessment. Furthermore, participants may have identified these issues quicker based on non-verbal presentations and background information of patients at the intake sessions.

Results from the logistic regression showed that in clinical cases one and three, participants with more years of clinical practice were less likely to assess for all three biopsychosocial issues. This finding did not support the third hypothesis, suggesting that MedFTs with more years of clinical experience would have a greater likelihood of making a biopsychosocial assessment than those with fewer years of clinical experience. While the result was somewhat surprising, it may also suggest that MedFTs who have recently graduated from masters or doctoral programs may have been more prepared in working with the biopsychosocial model than those who received their training longer ago. Professionals who have been practicing longer may have not had as much training in specialized "MedFT" or "collaborative care" courses as newly trained professionals. Furthermore, clinicians who have been practicing MedFT longer may not necessarily be better in their biopsychosocial practice and referral skills than newer MedFTs. As a

result, it appears that professionals at any level could benefit in attending updated trainings and courses in Medical Family Therapy, helping to assess patient care from all perspectives.

An additional finding from the logistic regression analysis was that in clinical case three, participants who were more inclined to obtain a release of information from patients were less likely to identify biopsychosocial issues in the clinical case. While this first seemed surprising, it should be noted that only 25% of participants either reported "never" or "rarely" obtaining a release of information at the initial session. This result could explain that most MedFTs obtain a release to speak with other providers, regardless of the issues presented at an initial session. Medical Family Therapists often work with low income and socioeconomic families, where retention rates can be very low in primary care clinics and medical settings. Getting this release helps to coordinate care for the patient quicker and may improve the likelihood of the patient gaining trust in the MedFT for treatment. Unlike traditional psychotherapy, where a release of information in an outpatient setting or private practice may not be urgent at an intake appointment, this release is crucial in establishing a care team for the patient in more collaborative, integrative environments.

It should be noted that the author decided not to use the "spiritual" component of the biopsychosocial model in this study. The term "biopsychosocial-spiritual" was adapted in the 1990s as a way to include the personal beliefs and values of patients and their families in the treatment of chronic conditions (White, 1996). Although this is a valuable component in the assessment and treatment of patients in medical care settings, the author incorporated solely the biopsychosocial parts of health addressed from Engel's

(1977) approach. As a result, the quantitative analysis of the data for questions one and two omitted information regarding participants' spiritual perspectives. However, participants did address some spiritual themes in the content analysis for clinical case two. Several participants felt that addressing the patient's and mother's spiritual views on medication and doctors were a significant theme in the overall quality of the patient's care. Future research that explores the practices and judgments of Medical Family Therapists could benefit from incorporating the "spiritual" element when assessing the skills of patient care and the coping mechanisms of patients around disease and illness.

Referrals for Treatment

The question which addressed whether or not participants would make a referral for treatment with other providers was, "What actions or interventions might you take with this client moving forward?" The author was surprised to find a wide variety of referrals that participants reported for all three clinical cases. Although participants' most common method of referral was with a medical professional, there were other providers and resources which participants felt warranted a consult after reading the clinical cases (e.g. nutritionist, school counselor, psychiatrist, financial resources, and substance abuse support group). This range of referrals and consultations showed that participants were considering the biopsychosocial context of patient care in treatment planning of these cases.

Another surprising finding was related to the percentage of participants who decided not make a referral or consult a professional on question two. Whereas 83% of participants made a successful referral or collaboration with a provider in clinical case three (e.g., Substance Abuse/Chronic Pain), only 63% of participants provided a referral

for clinical case two (Anxiety/GI Disorder). This was an interesting result, seeing that clinical case two involved a patient with symptoms of anxiety, apparent gastrointestinal issues, and resistance towards psychiatric medication. Considering that this diagnosis was reported as one of the most common medical issues seen by MFTs in Doherty and Simmons (1996) study, Medical Family Therapists should have been able to identify other professionals in the patient's plan of care. Functional gastrointestinal disorders compromise a major portion of practice in primary care. Problems that might require a referral for consultation and treatment with a G.I. diagnosis might include psychiatric disorders, serious impairment in daily functioning that requires specific treatment and social skills, or somatization, where multiple symptoms are leading to numerous consultations across specialties (Drosmman et al., 1999).

The findings from the logistic regression analyses showed that no independent variables were statistically significant in predicting the likelihood of making a successful referral. These findings to did not support the author's hypotheses in the study (Hypotheses 2,4 and 6). It was assumed that one's employment in a medical setting, increased years of clinical practice, and more coursework taken in school would predict a higher likelihood in making a referral for treatment in the clinical cases. Because the majority of referrals across all three clinical cases were medical collaborations, perhaps MedFTs as a whole see the importance of contacting a medical provider in the treatment of patients, despite their location or previous experience.

The author also used a content analysis approach to qualitatively analyze the themes and categories of responses on question two. After conducting a thorough analysis of all three clinical cases, the author found that very few mental health referrals

were reported by participants. For instance, only 6 out of 48 (12.5%) of those who made a consultation or referral, considered mental health to be a source of further collaboration. The author would have assumed that more participants would have made a mental health referral or consult, based on the clear symptoms presented for depression. The first paragraph of the clinical case one reported several features of depression which the client was experiencing at the time of the assessment. Perhaps MedFTs had assumed that they could have managed the symptoms and psychological aspects of the patient's care moving forward. Additionally, mental health professionals may not have been as concerned about depressive symptoms in this clinical case. For patients who seek treatment at a medical setting with level four or level five collaboration (Doherty, 1995), there may be a psychiatrist or physician already working within an integrated team for their pharmacological and mental health treatment. For those who practice in a level one or two level of care (Doherty, 1995), collaboration is minimal due to the lack of proximity to providers.

It was interesting to see the limited number of referrals across all three biopsychosocial issues in the content analysis. Although the vast majority of participants identified at least one referral that should have been made, very few considered the necessity of resources in all aspects of the patient's health. This finding was quite surprising, considering MedFTs view the health of patients across multiple domains. Since most participants reported feeling "very comfortable" working with these clinical cases on question three of the survey, perhaps a need for referrals may not have been urgent after an initial assessment.

Interestingly, case three had the most referrals or consultations reported by participants. Thirty participants made at least two separate referrals, highlighting the need for additional services and resources in this case. A few reasons may explain why participants made so many referrals for this particular patient. For one, the case offered multiple medical and psychosocial issues which required other professionals being part of the patient's care team. Participants realized that chronic pain, prescription drug abuse and financial hardship require extra services beyond mental health counseling. Second, the issues beyond the biomedical symptoms in the case may have been outside the scope of practice for Medical Family Therapists. With a wider variety of systemic issues presented, participants may have considered more referrals for the betterment of family members supporting the patient.

This study might further explain a critical gap in the communication between and coordination amongst providers, highlighted in Clark's (2009) article on collaborative practices between MFTs and MDs. In the Clark study, family physicians reported that the major roadblocks in making referrals to MFTs included patient reluctance (85%), HMO/Insurance restrictions (65%), Unavailability of appropriate therapist (40%), Time issues (34%), Unaware of Appropriate therapist (33%) and the Physician's belief that an MFT is not helpful (4%). This result emphasizes that collaboration is a two-way system in coordination of care for patients and families. With several participants working in level four and level five setting for collaborative practices (Doherty, 1995), it was still surprising to find the lack of biological referrals in the three cases. MFTs and other mental health professionals who work in integrative, primary and tertiary settings would

benefit from making initial contacts to medical professionals early in their professional careers.

Comfort Level Working with Cases

Question three in the clinical cases asked participants how comfortable they would feel working with each of these patients. Although participants reported that they felt comfortable working with the first two clinical cases, only 56% reported feeling "very comfortable" working with case three. Coincidentally, participants had the highest percentage of referrals or consults for this case in question two (83%). Perhaps participants did not feel that the details in case three were within their scope in working as a MedFT.

The author was surprised that fewer participants felt comfortable working with this case. In 2009, almost 7 million Americans use psychotropics non-medically each month, in which 5.3 million Americans misuse pain relievers (American College of Preventative Medicine, 2011). Furthermore, many primary care patients report chronic pain as one of their primary issues. Multi-faceted, collaborative interventions can improve outcomes for chronic pain conditions in primary care settings (Dobscha et al., 2009). It would seem that Medical Family Therapists have the advantage in consulting with other providers effectively with a patient suffering from chronic pain and suspected prescription drug abuse (Bishop & Springer, 2005). Seeing that 83.5% and 62% of participants have taken courses in medical/health issues and psychopharmacology respectively, MedFTs should have sufficient training in the issues presented in this case. However, in one study (Springer, 2010), where MFTs answered questions regarding a clinical case on an apparent mental health issue, only 35.7% of participants recognized

that a medication referral was necessary for the client. Perhaps more graduate programs who specialize in Medical Family Therapy need to put a greater emphasis on training in specific medical and pharmacological issues in the treatment of patients and their families.

Limitations

While this study serves many benefits for the field of Medical Family Therapy, there are several important limitations worth noting.

Sample

This study looked solely at therapists who met the qualifications as "Medical Family Therapists." Because the study was only able to recruit 86 participants, statistical power was compromised. Only 72% of participants completed all questions in the demographic section of the survey. Additionally, there was a wide range of experience of participants who completed the survey. Some participants had less than two years of clinical experience working in medically-based settings, while others had 20 or more years employed in similar settings. This created wide variability amongst participant experience, and may have confounded some of the findings to the three questions of the survey cases. Had this study recruited more participants to complete the survey, the statistical analyses may have shown stronger validity.

Furthermore, there were a number of questions in the survey where missing data were found. The author chose to keep most of the demographic questions "open-ended," so that participants could feel comfortable answering questions about their personal information. This method jeopardized the sample size in several questions, in addition to

participation of the clinical cases. Perhaps some participants felt that reading and completing questions form the clinical cases would be too time-consuming.

Additionally, the sample of this study was very homogeneous regarding race and ethnicity. Because 85% (n=72) of study participants were Caucasian, this may have created some bias in the results of the clinical cases. Had the study shown more variability in both race and ethnicity, the data might have been able to capture more cultural themes and practice patterns of participants working in various settings and populations.

Self Report

Another limitation to note was that participants self-reported information. Because information was self-reported, participants may have only wanted to share what they felt was necessary or comfortable when taking the survey. Social desirability may have been present in many of the responses to the clinical vignettes. Participants may have wanted to give the author answers relevant to the study aim, and not representing the accurate practices in their own work. As a result, participants may have gone back to change their answers to questions one and two in each of the clinical cases.

Coding System

The author used a subjective coding system for participant responses according to the biopsychosocial model. Even though there were specific biological, psychological and social/spiritual themes in each of the cases, deciphering which themes were most prevalent to a Medical Family Therapist was determined only by the author. Some participants may have thought that there was more than one issue in a biological, psychological or social domain. Furthermore, in order for a participant to successfully

fall into the "yes" category, they must have successfully identified all three clinical issues from the case. The "yes" and "no" categories which MedFTs fell into for this study should not reflect their ability to perform in medically-based settings. It may be beneficial to use a measurement in future research when coding specific clinical topics and issues from survey data.

Inclusion Criteria

The minimum criteria for participants to enter the study was somewhat vague. Even though there was no formalized training or educational requirements to be considered a 'Medical Family Therapist," the author of the study wanted to be inclusive of any mental health professionals who work in medical or hospital based settings. Internal validity of the study may have been jeopardized by not targeting a more homogenous sample of clinicians who practice in a collaborative setting, work with common medical and mental health issues, or work from similar theoretical orientations. Additionally, there was no assessment of how many hours participants spend performing clinical work as a Medical Family Therapist in these settings.

Future Research

There are several areas where further investigation and exploration are needed to understand how Medical Family Therapists practice around various biopsychosocial issues. While this study was able to explore the clinical practices of clinicians in medical settings, it does not cover all of the mental health and medical professionals who work with patients and their families around these issues. Future research should include all mental health professionals who provide therapeutic services in a medical environment (i.e., MFTs, Psychologists, Social Workers, LPCCs, Psychiatric Nurses and

Psychiatrists). By gathering information from the practices of all six professions, research could compare similarities and differences across both mental health and medical disciplines.

As the field of Medical Family Therapy continues to grow, COAMFTE accredited programs may want to consider implementing more coursework in medical, health and collaborative areas of practice. The fact that no clinical case had greater than 53% of participants making a biopsychosocial assessment of patients might warrant these additional curriculum areas. The intersection between MFT and MedFT is important for programs to acknowledge, teaching students the basics of the biopsychosocial approach to care. One study (Tyndall, 2012) developed a set of training requirements and recommended core competencies for the practice of MedFT. Although most MFT programs do not specialize in Medical Family Therapy as a concentration or emphasis, faculty should be aware of the increasing number of practicum positions that students are obtaining in medical settings. Therefore, more studies are needed to address the curriculum and training of MedFTs in Masters and Doctoral Programs. More specifically, this research should explore whether these programs are utilizing the biopsychosocial approach and other collaborative care models in their curriculum.

Additionally, this study only focused on the outcome measures of MedFTs assessing and treating patients based on various clinical cases. More qualitative studies should be conducted in this area of MedFT practice, exploring the attitudes and beliefs of MedFTs in their practice with regards to diagnoses, systemic issues and populations. By gathering this information, clinicians and researchers would be able to explore the thought processes of how MedFTs make the choices for assessment, treatment planning

and possible referral options. Researchers could also explore the lived experiences of MedFT trainees and new therapists in medical settings, assessing for how these clinicians adapt to the medical culture, terminology and collaboration in their training.

Furthermore, a replication of this study would be useful, going beyond the exploratory nature of MedFTs clinical practices. An assessment tool or instrument may be helpful to develop in determining what qualifications or requirements are needed to be a "competent" Medical Family Therapist. Areas such as diagnostic skills, use of the biopsychosocial model, eliciting the patients' narrative, collaborative practices, inclusion of the family system, agency, communion and assessing the cultural/spiritual context are all important qualities that MedFTs should exhibit. Although Medical Family Therapy requires both personal and informational skills of clinicians, there is no established set of core competencies in Medical Family Therapy. By researchers creating a minimum standard for clinicians who work in medical settings, academic and training programs could have a better determination of a student's performance and competence in the field.

Finally, while the author explored the clinical areas of Medical Family Therapy, future research would benefit in investigating the financial and operational areas of MedFTs. More studies (e.g., Crane, 2012) exploring the cost-effectiveness of having MedFTs in medical environments could advance this specialty greatly. MedFTs may also be cost-effective in primary care settings, addressing issues and areas of the patient's life that would otherwise be costly to patients seeking outside providers. Research could explore how MedFTs operate within the larger context of a medical system. Medical Family Therapists may be in greater demand in healthcare and managed care settings,

seeing that collaborative care practices amongst providers are becoming more viable and resourceful.

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Appendix A: Demographic and Forced-Closed Questionnaire

1. Gender
    a. Female
    b. Male

2. Please describe your race/ethnicity
    a. Caucasian
    b. African American
    c. Asian-American
    d. Hispanic-American
    e. Native-American
    f. Other (Please specify _____)

3. What is your highest level of education?
    a. Master's
    b. Ph.D.
    c. MD
    d. Other _____

4. List all post-graduate institutions that you have attended with corresponding degree (completed or currently enrolled)

    Example:
    University of San Diego, M.A. (completed)
    University of Minnesota, Ph.D. (currently enrolled)
    a. _____
    b. _____
    c. _____
    d. _____
    e. _____

5. Was any of your educational training from a COAMFTE (Commission on Accreditation for Marriage and Family Therapy Education) accredited program?
    a. Yes
    b. No

6. How many years have you been practicing therapy?

    _____

7. How option below best described your primary work setting?
    a. Private Practice
    b. Community Agency
    c. Medical Setting/Hospital

d. Non-Profit Organization
e. Educational
f. Other (Please Specify _____)

8. What is the main theoretical orientation that guides your clinical practice?

_____

9. Please check if you took coursework in the following areas (Check all that apply):
   a. Cultural issues ___Yes ___ No
   b. Sex Therapy ___Yes ___No
   c. Medical/Health Issues ___Yes ___No
   d. Spirituality ___Yes ___No
   e. Psychopharmacology ___Yes ___No
   f. Gerontology ___Yes ___No

10. Please check whether these topics were discussed in your practicum training (check all that apply):
    a. Cultural issues ___Yes ___ No
    b. Sex Therapy ___Yes ___No
    c. Medical/Health Issues ___Yes ___No
    d. Spirituality ___Yes ___No
    e. Psychopharmacology ___Yes ___No
    f. Gerontology ___Yes ___No

11. List the three most prevalent clinical issues that you treat in your practice
    1._____
    2. _____
    3._____

12. At an intake (in-person) session, how often do you inquire about the client's relational concerns?
    a. Never
    b. Once in a While
    c. Often
    d. Always

13. At the intake (in-person) session, how often do you inquire about the client's medical concerns?
    a. Never
    b. Once in a While
    c. Often
    d. Always

14. At an intake (in-person) session, how often to you obtain a release of information to contact other professionals in the client's healthcare team?

a. Never
b. Once in a While
c. Often
d. Always

Appendix B: Clinical Cases in the Survey

Clinical Case #1

Grace is a 13 year old African American female who attends the intake appointment with her mother, Doris. Grace lives with her parents and younger brother, Terrance (7). Doris was very concerned about Grace "not feeling herself recently," having times where she's not motivated to do anything in her life and cries quite often. Grace states that there isn't much going well in her life at this time and hasn't talked to friends outside of school in weeks. Grace's doctors were concerned about her elevated glucose readings during the last two appointments. Her lab results showed a high body mass index, high blood pressure and elevated sugar levels. She reports not being very physically active and doesn't enjoy working out. Her diet is erratic, eating fast food and snacks at least 4 times per week. Doris notices that her mood can be affected greatly if she eats sugary foods throughout the day.

Grace lacks energy during the day and has problems concentrating on simple tasks at home. Doris was concerned that the school counselor does not see Grace interacting much with her peers at school. Her grades have started to drop this past semester, with continued problems completing homework in all subjects. Grace also complained about having blurred vision in her right eye and continued fatigue throughout the school day.

Doris and her husband work full-time and have left Grace to look after Terrance on many occasions. Doris says, "I think Grace is going through one of those pre-teen phases, where she doesn't care about anything or anybody." Doris admits to giving into Grace's poor eating habits. Doris and her husband have a strong Christian faith and have been strongly pushing for Grace to enter into a youth group. The parents believe that some members of the church are better equipped to handle these types of situations than they are. Doris has continued to defy her parents in wanting to meet any new friends.

1. What are the three most significant issues presented in this case?

2. What actions or interventions might you take with this client moving forward?

   (min 150 characters)

3. How comfortable would you be working with this family?

Clinical Case #2

John is a 21 year-old single, Caucasian male enrolled part-time at a community college studying computer design. Upon sitting down, he nervously asks a series of questions about what this visit will entail. John first describes physical problems with abdominal pain, bloating and diarrhea occurring the last four weeks. John's severe cramping has forced him to miss several classes this past semester. After eating certain foods, John will have to lie down as long as two hours before the pain will fully subside. John has tried to change his dietary habits the last couple of months after reading new reports of cancer-causing food.

As John listens to you, you notice him tapping his foot on the floor persistently throughout the appointment. He reports that when he feels something wrong with his stomach, his heart races, he starts to sweat and often gets nauseous. John has confided only to you about his true pain symptoms, worried that other professionals may perform certain tests or procedures on him, only to discover a "worst case scenario." At the last doctor's visit, John was afraid when getting his blood pressure taken, concerned that his numbers would be high. John does not exercise much, spends much of his day on the computer and has no real friends or interactions outside of people on the internet.

John lives at home with his parents and he reports that his mother is worried for him. John said part of why he's living at home was because of finances, but also because his parents felt that he couldn't survive on his own. Although John believed that medication might help him calm his mood, his mother was insistent on John taking herbal remedies to reduce his stress. John's mother is strongly adamant on John not taking psychiatric medication, stating that this goes against all family's beliefs on healing the human body. John reports feeling comfortable with his mother being in control of his health concerns, saying, "she probably knows what I need better than any of the doctors here."

1. What are the three most significant issues presented in this case?

2. What actions or interventions might you take with this client moving forward?

   (min 150 characters)

3. How comfortable would you be working with this family?

Clinical Case #3

Maria is a 37 year-old unemployed, Latino female who attends the intake appointment with her two children. At the beginning of the appointment, she asks if you have any snacks for her kids, since they have not had any breakfast yet. Maria starts to stare at you in a bizarre way, appearing slightly disoriented in the room. She complains of having constant pain in her lower back, which has been persistent for over two years. Maria has difficulty walking long distances, having to sit down multiple times per day just to relieve the pain. Tightness and stiffness in her back is episodic, which takes her away from performing routine tasks throughout the day.

Maria was prescribed Vicodin for pain, reporting slight nausea and lightheadedness during the first few weeks of taking the medication. In the last two months, she started taking two extra doses each day. She claims, "the pain started to get worse in the evening time and I needed to be there more for my kids." Maria wanted multiple opinions from doctors about her back pain and the right medications for treatment. She says, "Of all the narcotic medications I've been on, Vicodin seems to help me the best." Additionally, her doctor stated concerns about recent tests done on her liver.

Maria has hopes of getting out of the homeless shelter soon, but has no immediate plans to apply for jobs. She expresses a deep frustration in not being able to provide a better life for her daughters, who are 9 and 12. Maria does not let her children see their biological father due to his history of alcohol abuse and legal troubles. As the session progresses, Maria starts to cry and doesn't know how to get additional resources to provide for her family. She has strained relationships with her mother and sister, who have difficulty trusting Maria with lending her money. Because of this recent cutoff, her family has not provided any financial or emotional support through her time at the shelter.

1. What are the three most significant issues presented in this case?

2. What actions or interventions might you take with this client moving forward?

   (min 150 characters)

3. How comfortable would you be working with this family?

Appendix C: Recruitment Letters

INITIAL LETTER

Dear Program Directors:

My name is Max Zubatsky, a Doctoral Student in Family Social Science at the University of Minnesota. I will be conducting a study on the clinical practices and judgments of Medical Family Therapists around various topics. This study is important in gathering information about the practice of clinicians who define themselves as Medical Family Therapists. Additionally, results from this study could add to the body of literature to the framework of Medical Family Therapy.

Please forward this email to any prospective students and/or clinicians who may be interested in completing the survey for the study. Study participation is voluntary and participants can withdraw from the study at any time. To access the survey, students and clinicians can click on this link and be prompted to complete the informed consent process. (LINK).

Thank you for your time and consideration in doing this. If you have any questions about the study process, please contact me at zubat001@umn.edu or Steve Harris, Ph.D. at smharris@umn.edu.

Sincerely,

Max Zubatsky, Ph.D. Candidate
University of Minnesota

PRENOTICE EMAIL

Dear AAMFT Clinical Member:

I am a doctoral candidate in the Marriage and Family Therapy program at the University of Minnesota. I will be conducting a study on the clinical practices and judgments of Medical Family Therapists around various topics. I am emailing you this notice ahead of time so that you are aware of the timeframe in sending the survey. Within the next week, you will receive an email to complete the brief, online survey.

This study is important in gathering information about the practice of clinicians who define themselves as Medical Family Therapists. Additionally, results from this study could add to the body of literature to the framework of Medical Family Therapy.

Prior to enrolling in the study, you will be asked to read and sign the informed consent form. Your participation will require you to agree to the study purpose, procedures, risks, and benefits of the study. At any point during the study, you may withdraw your participation in taking part in the study.

Thank you for your time and consideration. Your participation in this study would be greatly appreciated.

Sincerely,

Max Zubatsky, Ph.D. Candidate
Marriage and Family Therapy Program
University of Minnesota

INVITATION TO THE STUDY EMAIL

Dear AAMFT Clinical Member:

I am a doctoral candidate in the Marriage and Family Therapy Program at the University of Minnesota. I am currently conducting my dissertation on the clinical competencies of Medical Family Therapists around different clinical issues. I am looking for clinicians who qualify as being a "Medical Family Therapist." The criteria for participating in this study includes:

- Participants must be an active member of AAMFT (American Association of Marriage and Family Therapy)
- Participants must have received either their masters or doctorate degree in Marriage and Family Therapy
- Participants must be currently practicing or have practiced therapy within the last 2 years in a medically based setting.
- Participants must have at least 2 core courses in medical-based curriculum during their academic training (e.g.: psychopharmacology, families and health, medical family therapy, etc.)
- Participants must either be a member of a medically based organization (CFHA, Society for Behavioral Medicine, etc.) or have completed at least two trainings in areas related to family therapy and medicine.

I am seeking clinicians who are willing to complete the study, which includes demographic questions, reading three clinical vignettes, and answering two open-ended questions to each vignette. The process of completing the entire survey is anticipated to be 30 minutes long. All involvement in the study is confidential and your information will be stored on a secure server. The study is completely voluntary and you have the right to withdraw from the study at any time. There are no anticipated physical or psychological risks as a result of taking this study. Although there is no monetary benefit to participating in this study, your participation can help benefit the growing field of Medical Family Therapy regarding clinical and research patterns.

This study has been approved by the University of Minnesota Institutional Review Board for the Protection of Human Subjects. To participate in the study, you can either click on the link below or copy/paste the link in your web browser:

(Link) NOTE: By clicking on this link, you have now consented to participate in this study

If you have any questions, please contact either Max Zubatsky at zubat001@umn.edu or Steven M. Harris, Ph.D., LMFT at smharris@umn.edu. For any questions about the consent process or your rights as a participant, you can contact the University of Minnesota Institutional Review Board at irb@umn.edu.

Sincerely,

Max Zubatsky, Ph.D. Candidate
University of Minnesota

Steven M. Harris, Ph.D., LMFT
University of Minnesota

FOLLOW-UP EMAIL

Dear AAMFT Clinical Member:

Last week, we sent you an email requesting your participation in a study investigating the clinical competencies of Medical Family Therapists. We are very interested in your participation and would like to offer a gentle reminder of this opportunity to complete the survey. We understand that this is a very busy time, but your feedback will be extremely helpful in advancing the field of Medical Family Therapy research.

To participate in the study, either click on this link or cop/paste the link into your web browser.

(Link) By clicking on this link, you are giving consent to participate in the study.

If you have any questions, please contact either Max Zubatsky at zubat001@umn.edu or Steven M. Harris, Ph.D., LMFT at smharris@umn.edu. For any questions about the consent process or your rights as a participant, you can contact the University of Minnesota Institutional Review Board at irb@umn.edu.

Sincerely,

Max Zubatsky, Ph.D. Candidate
University of Minnesota

Steven M. Harris, Ph.D., LMFT
University of Minnesota